

THE RAILWAY GAZETTE

A Journal of Management, Engineering and Operation
INCORPORATING

Railway Engineer • TRANSPORT • The Railway News

The Railway Times • Herapath's Railway Journal • RAILWAY RECORD.

RAILWAYS • ILLUSTRATED • ESTABLISHED 1835 • THE RAILWAY OFFICIAL GAZETTE

PUBLISHED EVERY FRIDAY

33, TOTHILL STREET, WESTMINSTER, LONDON, S.W.1

Telegraphic Address: "TRAZETTE PARL., LONDON"
Telephone No.: WHITEHALL 9233 (8 lines)

Annual subscription payable in advance and postage free
British Isles and Abroad £2 5s. 0d.
Single Copies One Shilling
Registered at the General Post Office, London, as a Newspaper

VOL. 81 No. 20

FRIDAY, NOVEMBER 17, 1944

CONTENTS

	PAGE
Editorial Notes	473
The Plaintiff of the First Class Traveller	475
Reducing Traffic Peaks	476
U.S.A. Railways—Facts and Figures	476
Letters to the Editor	478
The Scrap Heap	480
Overseas Railway Affairs	481
The Human Element in Transport	482
The Railway Executive Committee—I.....	483
Recovery of Railway Upholstery Materials	491
Personal	493
Transport Services and the War	497
Stock Market and Table	504

DIESEL RAILWAY TRACTION SUPPLEMENT

The November issue of THE RAILWAY GAZETTE Supplement, illustrating and describing developments in Diesel Railway Traction, is now ready, price 1s.

GOODS FOR EXPORT

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this paper should not be taken as indicating that they are available for export

NOTICE TO SUBSCRIBERS

Consequent on the paper rationing, new subscribers cannot be accepted until further notice. Any applications will be put on a waiting list, and will be dealt with in rotation in replacement of subscribers who do not renew their subscriptions

POSTING "THE RAILWAY GAZETTE" OVERSEAS

We would remind our readers that there are many overseas countries to which it is not permissible for private individuals to send printed journals and newspapers. THE RAILWAY GAZETTE possesses the necessary permit and facilities for such dispatch.

We would emphasise that copies addressed to places in Great Britain should not be re-directed to places overseas

TO CALLERS AND TELEPHONERS

Until further notice our office hours are: Mondays to Fridays 9.30 a.m. till 4.45 p.m.

The office is closed on Saturdays

ANSWERS TO ENQUIRIES

By reason of staff shortage due to enlistment, we regret that it is no longer possible for us to answer enquiries involving research, or to supply dates when articles appeared in back numbers, either by telephone or by letter

ERRORS, PAPER, AND PRINTING

Owing to shortage of staff and altered printing arrangements due to the war, and less time available for proof reading, we ask our readers' indulgence for typographical and other errors they may observe from time to time, also for poorer paper and printing compared with pre-war standards

Duration of Railway Control

TOWARDS the end of last week some activity developed on the London Stock Exchange in the stocks of the home railway companies, on reports that a more precise term was to be put to the duration of the wartime financial arrangement between the Ministry of War Transport and the four main-line railway companies and the London Passenger Transport Board. At present it is provided that control is to be continued for a minimum of one year after the cessation of hostilities. On the other hand, it is generally expected that this minimum is likely to be exceeded and, indeed, Mr. P. J. Noel-Baker, Parliamentary Secretary to the Ministry of War Transport, stated in the House of Commons on May 5 that, when the war was over, "we shall have a considerable period before control will end." It is specifically provided in the present agreement that, before control comes to an end, time will be given for the operation of any statutory machinery governing the level of charges, and it has been suggested by Government spokesmen that a general plan for the organisation of transport may be put forward before the end of the operation of the present arrangements with the Government. Also presumably before control comes to an end, it will be necessary to reach some agreement with the companies as to the provision which is to be made for abnormal wear and tear, arising out of the overworking of the railways' physical assets.

Sir Felix Pole on Need for Exports

Sir Felix J. C. Pole, Chairman of the Associated Electrical Industries Limited, formerly General Manager of the Great Western Railway, has contributed an outspoken article to *The Financial News*, in the course of which he says that the United Kingdom is in a position in which it must either regain its export trade or face a general decline in its standard of living. He declares that large orders await British manufacturers if they are allowed to take them, and he calls for a clear lead by the Government to industry. He urges the Government to expedite decisions on export credits, facilitate overseas visits by trade representatives, finalise long-term trading arrangements with Russia and other countries, and says that above all it must leave each industry freedom of action within any necessary regulations. Sir Felix Pole emphasises the point, that has been made frequently in these columns, that manufacturers whose works were kept going in pre-war years by orders from overseas, wish to know exactly what is the policy in this country in the matter of export trade. These companies know the potential demands for their products, and they also know something of the activities of their competitors. Sir Felix Pole believes that the nation's primary need is for exports, and that if this country is to do the maximum amount of export trade it will be necessary to ration home orders.

The Human Element in Transport

Mr. Robert Kelso's Presidential address to the Institute of Transport, the delivery of which had been delayed because of his ill-health, was given on Monday last. He took as his subject "The Human Element in Transport," a matter of which all too little is heard in the discussions which are so prevalent on planning for post-war organisation. Yet in the final analysis the human element enters largely into every phase of transport and without the practical manifestation of the tradition of service which has animated all grades of transport workers during the present war, the extraordinary feats which have been achieved could not have been possible. Mr. Kelso was on good ground when he urged that the Government should give free enterprise in transport a fair chance of functioning successfully, for without that spur the incentive to constant improvement will be blunted. Mr. Kelso, in dealing with the future shape of the internal transport of this country, gave a brief synopsis of a number of more important views which have been aired on this subject recently. All these, however, as he pointed out, dealt with the material make-up of the industry and its administration and operation. These are all important matters, but that raised by Mr. Kelso in his address, which is reported on page 482, must rank with them.

Government Controls of Industry

Some of the difficulties arising from the multifarious Governmental controls, which during the war have affected industry, are apparent from a speech made by Mr. Michael Dewar in his Chairman's address to the recent ordinary general meeting of British Timken Limited. Mr. Dewar pointed out that the bureaucrats had not found it possible yet to control industry through one channel. Factories are the perquisites of the Ministry of Works and the Board of Trade. Labour is the responsibility

of the Ministry of Labour. Machine tools are governed by the Machine Tool Department, responsible partly to the Ministry of Supply and partly to the Ministry of Production. The provision of British Timken's raw material is mostly the function of the Iron & Steel Control. It was recently remarked in Parliament that in supply circles not only does the right hand not know what the left hand doeth, but even the fingers of the same hand have no knowledge of what the next-door neighbour is doing. Mr. Dewar declared that those in industry who had experience of control could only pray for the rapid return to a state of affairs in which it was possible to reach a decision without having to consult endless committees of persons whose experience of industry was so limited as to be almost negligible.

◆◆◆

Censorship in Great Britain

All were agreed in regarding censorship as an ugly thing accepted only as an unfortunate necessity, said Rear-Admiral G. P. Thomson, the Chief Press Censor, in an address to the Publicity Club of London last week. He emphasised that ours was a democratic country, and that the very word censorship seemed foreign to our ideas, and to that right to think, speak, and act according to our conscience, for which we were fighting. A free press was one of the liberties to which British people were most strongly attached, but when war came we could not afford to tell the enemy all that we were doing and hoping to do. Admiral Thomson said that the goal of censorship was co-operation and not prosecution, and, although one of the functions of the Censors was to point out why certain things could not be said in the interests of security, an equally important function was the advocacy of the Censor with Government Departments to release as much news as possible and as quickly as possible. After more than 5 years of experience of censorship, he suggested that it was performing the double duty very well, and meeting the conflicting requirements of a free people who refused to be kept in the dark, and of a nation organised to fight a total war. We may add that our own not inconsiderable experience of censorship endorses this view, and makes us wish that other Government Departments would not purport to run their own censorships (always of a restrictive kind) in rivalry with the official censorship with its wealth of knowledge and experience.

◆◆◆

Unofficial Censorship

In publishing circles there has been a growing volume of indignation for a long time against the efforts of various public relations officers in Government Departments to act as unofficial censors, and this has now been ventilated by the editor of one of the large national newspapers. In fact, this particular newspaper took the step on October 28 of posting notices in its offices, advising its staff to avoid dealings with public relations officers so far as possible, as it regarded their activities as a disservice to the public by the suppression of news. Most publications, including ours, have had experience of efforts of public relations officers in Government Departments to suppress information which has already been passed by Admiral Thomson's Censorship Department. It is not always easy to ignore such an attempt, as it is backed up by the implicit suggestion that refusal to comply will result in the curtailment of further facilities and information. The irritation thus caused to publishers, and the denial to readers of information with which they might be supplied legitimately, is but one aspect of the situation, and not necessarily the most important. In view of the progress of the war, and the hopes of an early resumption of export trade, there are occasions when the activities of this unofficial censorship are harmful to important British commercial interests, by denying them the credit for their achievements, whereas their American counterparts are given every encouragement to publicise corresponding achievements. As the world at large is apt to regard "security considerations" as generally corresponding in the various great countries of the United Nations, there is often a tendency to assume that the much-publicised achievements of manufacturers in one country are superior to the concealed achievements of another.

◆◆◆

British-Owned Argentine Railways' Exchange Rate

As was briefly recorded in our last week's issue, the Argentine Government has issued a decree establishing temporary selling rates of 14 pesos to the £ for remittances to British-owned Argentine Railways in payment of material imports and of 14.15 pesos to the £ for financial services. The previous rates were 15 pesos for materials and 16.15 for remittances. The communique issued by the Argentine Ministry of Finance states that by virtue of the negotiations which the privately-owned railways have carried out

to obtain more favourable exchange rates necessary for their remittances abroad, the Government has decided to establish the above-mentioned temporary selling rates. It adds that the measure is transitory and is related to the agreement reached with the railways, which was dealt with at length in our last week's issue. The change in the exchange rate represents an improvement of 13 per cent., and instead of having to meet a depreciation in the peso of between 41 and 31 per cent., according to the type of remittance, the depreciation below the old par of exchange of 11.45 will be only between 23.5 per cent. and 22.25 per cent. On this basis, last year's exchange loss of £2,750,000 for all the railways should be reduced to £1,500,000 or £1,600,000. Out of this will have to be met additional labour costs and so forth.

◆◆◆

The Work of the Paris Metro

From the early days of the war, surface transport in Paris was severely reduced, and, when the German occupation began in 1940, it disappeared, leaving the famous Paris Metro system to meet practically all the urban transport needs of the city. From time to time we have been able to give some details of this Metro traffic during the German occupation, and now we have received from our own correspondent in Paris a comprehensive statement which we publish this week (page 499). Despite cuts in electric power supply, and the periodical closing of many stations, the traffic handled was of an impressive order, reaching on some occasions more than 4 million passengers a day. To provide more standing room, it was at one time decided to abolish seats (never very numerous on the Paris Metro trains), but this plan was suspended because of the lack of materials and labour to make the alterations. However, on the most overcrowded line, a beginning had been made, and had shown that the capacity could be increased by 7 per cent. It appears that all traffic was suspended during air raid alerts, and that, by reason of the fact that most of the stations are immediately beneath street level, very few could be used for air raid shelters. The Paris Metro has important plans for the future, and these are touched on briefly in our article.

◆◆◆

War Fares in Germany

With the object of reducing the use of labour and material, although at the expense of an expected loss in revenue, a considerable simplification of suburban fares has been introduced in Germany. A uniform standard fare was adopted in the Hamburg area on September 1, and on October 1 the new fares became effective in the Berlin area, both on the S-Bahn of the Reichsbahn, and also on the Municipal U-bahn, trams, and buses, of the B.V.G. On the S-Bahn, the number of categories of fares has been reduced from 28 to 8, and the system has been divided into a circle zone and five suburban zones. Second-class fares are now exactly double the third-class fares, a measure intended to act as a deterrent to the increasing use of second-class accommodation. With the introduction of these war fares (*Kriegstarife*), ticket barriers at exits have been abolished, but tickets are inspected in the trains by "voluntary" helpers, consisting in the main of members of the Reichsbahn staff of all ranks, working in their own time. In addition to simplification, one of the principal features of the arrangement (of which we give brief details, page 497), is the extended use of ten-trip and eight-trip tickets.

◆◆◆

Diesel versus Steam

In the competition between diesel and steam propulsion, the newer competitor has enjoyed various advantages which have not been equally at the disposal of steam. For example, the use of diesel-electric power for high-speed passenger service has from the first been associated with lightweight streamline rolling stock, which has helped both towards the maintenance of high sustained speeds, and also, by reducing resistance, has played a measurable part in the reduction of running costs. In the United States, also, where some 2,200 diesel-electric locomotives are now at work on passenger, freight, and shunting duties, diesel maintenance is being organised similarly in a way which goes far towards explaining the high availability of the diesel units. Millions of dollars are being spent in laying down and equipping special plants for diesel maintenance; here the diesels have the advantage of new and well-lighted buildings of the latest type, free from dust and dirt; a specially-trained personnel accustomed to working to close tolerances; the systematic replacement of parts at predetermined intervals; a detailed and continuous record of maintenance for each individual unit; and, indeed, every encouragement to maintenance work of the highest quality. In comparison with such maintenance conditions, those at many

steam locomotive running sheds would make a very poor showing. In any appraisal of the relative economies of diesel and steam propulsion, such factors as the foregoing should be taken into consideration.

Timber Preservation

The claim has been made, probably with reason, that in countries with well-developed railway networks the railways, taken collectively, are the largest users of timber and of timber products, and chiefly, of course, in their heavy consumption of timber for track use. It is also probably true that the railway industry has given a bigger impetus than any other to the development of wood preservation, by creosoting and in other ways, though the technique of its application has advanced with considerably greater speed in some countries, as, for example, the United States, than in others. It is doubtful if attention paid to the preservation of railway sleepers has been applied equally to timber used for other railway purposes. Recent costly and extensive fires in stations, engine-sheds, and timber-lined tunnels in the U.S.A. have made it clear that relatively little has been done towards fireproofing the timber that may be exposed to fire hazards. There has been some development in the use of salt treatments, however, in locations where, for fire or other reasons, creosoting is undesirable, such as the roofs of engine-sheds, where a combination of damp with locomotive exhaust can be particularly destructive. Salt-treated timber is also being used on an increasing scale in North America for floors, exposed platforms, warehouses, goods stations, and other above-ground locations.

American Railway Reorganisation

For the past decade, financial reorganisation has been proceeding on the many American railways, some of them large and influential lines, which became insolvent in the worst depression years from 1930 onwards. The House Judiciary Committee of the United States lately has issued a report condemning the policy which has based many of these reorganisations on the minimum earnings of the depression period, and thereby has caused "the destruction of hundreds of millions of dollars of railway securities." In the twenty years from 1910 to 1929 inclusive the railways of the U.S.A. earned an average gross income of \$1,164 million, out of which an average net income of \$535 million was available for the payment of dividends. In the five years from 1931 to 1935 these figures shrunk to \$685 million and no more than \$19 million respectively. The reorganisation plans adopted by the Interstate Commerce Commission, and approved by the Supreme Court, have been based on "normal expectancy" as to income, but they have disregarded both pre-depression earnings and the future earning capacity that has been demonstrated in so striking a fashion during the present war; for between 1939 and 1943, gross railway revenue has mounted to \$1,200 million, and net revenue has recovered from \$19 to \$523, notwithstanding the payment of very greatly increased federal taxes. It is now widely argued that there is no ground for using depression earnings as the basis of future earnings unless it is assumed that depression is to be permanent; and there is nothing in American history to justify such an assumption.

A Model Locomotive Museum?

A desire is often expressed by those interested in the development of the locomotive that representative examples of famous locomotive classes might be preserved. To a very limited extent this has been done; York Railway Museum, for example, houses a Stirling 8-ft. single of the one-time G.N.R., a North Eastern Tennant 2-4-0, the Brighton 0-4-2 engine *Gladstone*, and the G.W.R. 4-4-0 *City of Truro*. But there are severe limits to the lengths to which such a policy can be carried. To house a number of full-size locomotives considerable storage space would be needed, and to keep in presentable order this mass of machinery would require no small expenditure of labour. Again, the scrap value of entire locomotives is such that it is questionable if any justification could be advanced for preserving them in any large numbers. This argument does not apply, however, to models. A single building could house and display a large number of models, the care of which would be a relatively simple business, and accurate scale models of many of the locomotive classes which it is desired to commemorate are already in existence in private collections. With models, also, it would be possible to preserve for posterity the appearance of locomotive classes of which the last survivors have long since gone to the scrap-heap. This is a matter which might be commended both to the railway companies and to the Institution of Locomotive Engineers; also any adequate scheme would doubtless receive the enthusiastic support of various amateur societies interested in the locomotive.

The R.E.C. and Its Headquarters

FROM the public viewpoint the Railway Executive Committee came into being on the fateful September 1, 1939, as the agent of the Minister of Transport for the purpose of giving directions under the Railway Control Order, 1939, when the Government assumed control of the main-line railways. Beginning on the next day, the name "Railway Executive Committee" was seen throughout the country as the signatory to Orders announcing curtailments of services and facilities. It was noteworthy that neither these announcements nor any subsequent statements have ever contained an address, and the notepaper of the R.E.C. continues to be no more specific than to state "London, S.W." and to give one of the telephone numbers of the Railway Companies' Association. This specially-arranged postal address does not even supply the correct postal district of the R.E.C. Headquarters, and the telephone number gives not the slightest indication of location. It is only now, after more than five years of war, that we are permitted to describe something of the working of the R.E.C., and of the careful preparation of its Headquarters, in two articles, the first of which we publish this week. As a "shadow" advisory committee, the R.E.C. was formed at the time of the Munich crisis, on September 24, 1938, and during the next 11 months it undertook a vast amount of preparatory work and appointed 15 consultative committees.

It was obvious when the advisory R.E.C. was formed that this committee would assume important executive functions in the event of war conditions, and the need arose for adequately protected headquarters from which the R.E.C. could operate even during severe aerial bombardment. Various possibilities were considered, and eventually it was decided to use a disused tube station for the office of the committee, as this would provide adequately-protected accommodation for the members and staff in which to work, eat, and sleep, and would also safely house the important telephonic system. It is still not permissible to particularise among the many disused tube stations in the London area which were available, but, as the general conditions are similar in various places, it is possible to describe something of the ingenuity with which such a difficult site was converted to office and residential uses, and to give drawings of the protective works and the ventilation system which were necessary to achieve the objective. In a subsequent article we hope to describe the R.E.C. in action, and to give a series of photographic illustrations of the officers and staff at work; of the catering facilities; and of the sleeping and toilet arrangements. To facilitate the interchange of correspondence, the London Passenger Transport Board arranged for a seven-day-a-week service to be provided by motor-cycle despatch rider between various important railway and Government offices, including the R.E.C. headquarters. This service came into operation within the first few weeks of the war, and is still maintained.

The Complaint of the First Class Traveller

ALTHOUGH we sympathise with the unfortunate experience of Mr. H. Newman of Birmingham, as recounted in his letter to *The Times* on November 8 (see page 500), his sweeping allegations of fraudulent trading on the part of the railway companies are not only without foundation but betray a complete lack of knowledge of the position, as Sir James Milne pointed out in his reply on November 10. Briefly, Mr. Newman complained that the railways, having sold their full quota of first class tickets, permit the holders of third class tickets to occupy the accommodation, and collect the excess fares which they retain for their own benefit, while the passengers who purchased first class tickets have to stand in the corridors. In the London area of the railways and on London Passenger Transport Board vehicles there is no provision for first class accommodation, although for short distance travel in this area some maintain that the taxi is the equivalent of first class. But they are more difficult to obtain than first class seats on a train.

Apart from the fact that as the railways are under Government control, all their receipts are on Government account, resulting in the Government during 1943, for instance, receiving £105½ millions out of which it had to pay the railways £43 millions, it is pertinent to enquire how any railway company can determine when it has sold "its full quota" of first class tickets. Although the first class accommodation available on each train is a known factor, Mr. Newman is clearly unaware that the majority of railway tickets issued are return tickets,

consequently the railways can never know even the day on which passengers will make their return journey. Even if this difficulty were surmounted by a decision to issue single tickets only—a proposal open to most serious objections—there remains the further difficulty that many passengers purchase tickets from ticket agencies throughout the country, and it would be impracticable to correlate their issues with those of the railway company in time to secure that bookings did not exceed the accommodation. Further, first class passengers join trains at many stations *en route*, and the number joining at each place varies from day to day.

Bearing in mind these considerations and the fact that the issue of a first is not a contract to carry a passenger by any particular train, it will be appreciated that the only possible ways of overcoming the present difficulties are for first class accommodation to be abolished entirely, or for the railways to provide the train services and accommodation which they know by experience will meet requirements. The first alternative probably would be found to create more inconvenience than it cures, and the second is impossible under war conditions when the train service is so extremely restricted. The railway companies naturally desire to see that first class passengers get the class of accommodation for which they have paid, but they have no power to eject third class passengers from first class seats when they are prepared to pay the difference in fare. The collection of these excess fares is of no financial benefit to the railways at present, whereas their inability to provide sufficient first class accommodation may well lead to a loss of goodwill. Until they are enabled to run additional trains, their only course seems to be to refund with alacrity the difference between first and third class fares on reasonable proof that the passenger was unable to secure the class of accommodation for which he had paid.

Reducing Traffic Peaks

THE normal desideratum of all traffic officers to secure an even curve of traffic density throughout the day proved impossible of achievement in peacetime, and, even with the regimentation which is tolerated in war conditions, has not been attained, fully. Nevertheless, the incentives of using fewer vehicles, reducing vehicle mileage, and lowering the consumption of fuel and tyres, have combined to induce many large factories and offices to co-operate in schemes of what are termed—some-what uneuphoniously—as “staggering.” Such schemes have not produced the even curve, but they have resulted in a substantial flattening of the former peaks and valleys, and thus amply justified themselves in war conditions, and demonstrated the practicability of arrangements which may still have their effect on the activities of more peaceful days. So far as concerns the London area, the London Passenger Transport Board has compiled some interesting details of the effect of staggering schemes on its traffic, and from these we have extracted the following information.

Although efforts were made by the London Passenger Transport Board before the outbreak of war to secure some spreadover of the peak loads by voluntary agreement, very little was achieved, as many important interests took the attitude that it was the business of transport facilities to suit industrial requirements, and not *vice versa*. It was not until 1941, when Government Orders gave statutory powers to the appropriate authorities, that effective steps could be taken. The country was divided into production regions, each supervised by a regional board; the South-Eastern Regional Board is the authority for that part of England which includes Greater London. These boards were given the task of dealing with transport adjustment, as transport is an important factor in production. A board consists of representatives of the Ministries of Production and of Transport, of the traffic undertakings in the area, and of the federations of employers and employees (in the last case, the trade unions). Numerous meetings were held, and eventually 1,100 firms became partners to traffic staggering arrangements in the Greater London area. The workers involved total some 500,000, of whom 100,000 have agreed to the necessary modifications in their daily routine of travel, and of beginning and ceasing work. This does not mean that 400,000 have refused to make a change; it has not been necessary for them to do so, as the relief afforded by the staggering of the 100,000 made it possible to deal satisfactorily with the transport of the great majority, without re-adjustment.

Attention was first directed to those persons engaged in munition works whose travel movements were concentrated at half-hourly intervals before 8 a.m. Some 500,000 of these workers were involved within a radius of from 12 to 15 miles from the centre of the city. In addition to munition workers, there were large numbers employed in other industries. Similarly, those arriving at shops and offices between 8.30 a.m. and 10 a.m. were insistent upon arriving and leaving on time. The eventual solution, so far as buses were concerned, was to persuade various large factories and offices to modify their times by 15 minutes on a planned arrangement, so as to spread the load and flatten the peak. How overcrowding and discomfort were transformed into comparative ease can be gathered from the figures of the numbers of employees arriving at a group of factories in East London. They indicate that in sections of the peak hours overcrowding was rampant, whereas at other times accommodation was not fully used, until the application of the 15-minute staggering:—

	No. of workers arriving	
	Old rate	New rate
7.00 a.m....	302	302
7.15 a.m....	—	3,000
7.30 a.m....	5,514	2,514
7.45 a.m....	56	3,556
8.00 a.m....	6,337	2,067
8.10 a.m....	—	870
8.30 a.m....	900	900

Under the Fuel Restriction Order, London Transport had 80 per cent. of the buses previously in service, but was able to cover only 75 per cent. of its previous mileage. The situation was aggravated by the fact that the number of vehicles actually on the roads is 45 per cent. greater at the peak periods in the mornings and evenings than at the intervening normal hours. Some 3,800 buses are in use at 8 a.m. and 2,500 at 10 a.m. In the case of the London Transport railways the discrepancy is much greater, for in their case the increase is 94 per cent. That is to say, the demand made upon them is nearly doubled at the busy times. It was found that, at Underground stations in the Central London area, 26,000 persons arrived in one 15-minute period, while during the preceding quarter-of-an-hour it was only 15,000. At night, on the homeward journeys, in one 15-minute period 35,000 passengers demanded accommodation, whereas only half-an-hour earlier hardly any more than half that number had to be catered for. In making the various readjustments comprised in the term staggering, London Transport has recorded that the help and knowledge of officials of the main-line railways, their cordial team-work, and their grasp of the urgency of the task, helped enormously. Organised public opinion, as represented by trade unions, employers' groups, and so forth, has also been harnessed to the continuing effort, and today there are 51 Group Leaders in the London Transport Area, forming local converging points for queries and complaints and the adjustments required by local and special conditions.

U.S.A. Railways—Facts and Figures

IN our October 27 issue we commented at some length on the statistics contained in the booklet entitled “British Railways—Facts and Figures.” Through the courtesy of Miss E. O. Cullen, Reference Librarian, Bureau of Railway Economics, Washington, D.C., we are now able to review a more elaborate brochure about the U.S.A. railways bearing the title “Railroads in this Century: A Summary of the Facts and Figures with Charts.” The tables and diagrams included in this booklet were prepared originally for the use of the committee appointed by the Association of American Railroads to study all aspects of the transport problem. The exhibits present the history and trends of the railway industry since 1900 in condensed form and proved so helpful that the A.A.R. decided to make them available for wider use. Into 24 pages are packed facts and figures for all U.S.A. railways covering the years 1900 to 1943. This formidable mass of information is arranged, clearly under 55 separate heads and each statistical table is illustrated by a diagram. Here are a few of the outstanding features which caught our attention as we scrutinised the various items.

In the 20 years from 1923 to 1942, inclusive, the investment in road and equipment was increased from 21,373 million dollars to 25,838, or by 21 per cent. Over the same period capital expenditures for additions and betterments on Class 1 railways, which have annual operating revenues of a million dollars or more, amounted to 10,580 million dollars. This large sum repre-

sents money actually spent, without making allowance for retirements, under the heads shown below:—

	Dollars in millions
Additional track	1,312
" ballast	158
Heavier rails	625
Locomotives	1,263
Freight wagons	2,993
Passenger coaches	591
Shops and engine sheds	394
Other improvements	3,244

In the same 20 years the Purchasing Agents of Class 1 railways spent over 20,265 million dollars on fuel, materials and supplies. This expenditure is split under four headings in the diagram which we reproduce. It is interesting to notice that the purchases in 1923 were a record and cost \$1,738,703,000 as compared with \$1,394,281,000 in 1943. This points to a measure of success attending America's effort to avoid inflated prices during the second world war.

Perhaps we should explain that the Class 1 railways haul 99 per cent. of the total rail traffic; and what a prodigious volume of freight is put on rail!

In 1943 the originating tonnage was 1,555,000,000 tons, nearly twice the weight forwarded in 1938. Last year the average length of haul was 470 miles compared with 356 miles in 1938. Revenue ton-miles in consequence reached the record high level of 730,407 millions—about 30 times the ton-mileage of the British railways. Our passenger travel, on the other hand, is more intense. Our railways carried 1,268 million passengers last year: in the States only 891 million people made a rail journey, but each of them went 99 miles on an average, or nearly four times as far as the average British passenger.

The A.A.R. claims that the 1943 record traffic was handled by the railway companies without the prolonged congestion and delays of the first world war period when the State took possession of the railway system and controlled all movements. In 1943 the companies were left free to work the lines in their own way,

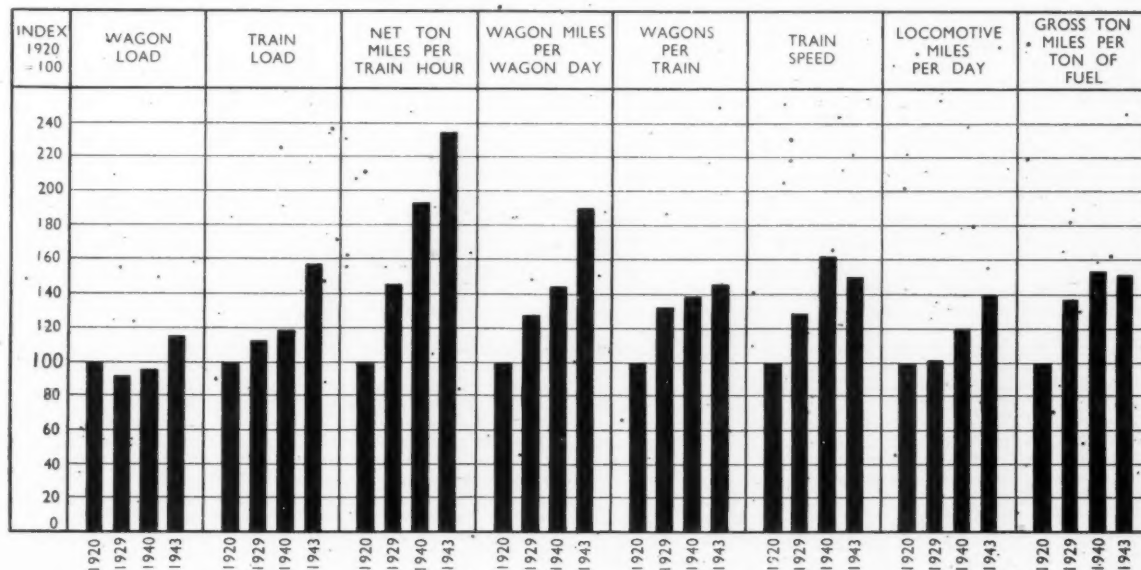
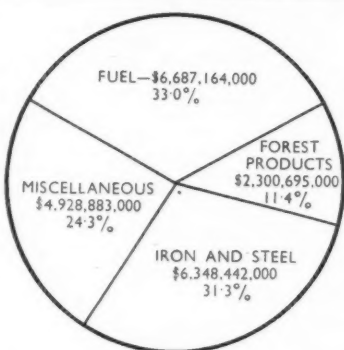
subject to guidance as to the priority of traffics, and carried on successfully with one third fewer locomotives, one fourth fewer freight wagons and one third fewer passenger coaches than were available during the last war. They also employed half a million fewer men. Drive and efficiency have been conspicuous in all departments. In spite of the difficulty of obtaining materials, the engineers laid 1,192,000 tons of new rails in 1942, twice the quantity laid in 1938, and put into the track nearly 44,000,000 creosoted wooden sleepers—10,000,000 more than they installed in 1938. Last year the mechanical engineers kept the number of locomotives awaiting repairs down to 5 per cent. of the total stock and the percentage of freight cars awaiting repairs was round about 3, as compared with 11 in 1938. Passenger locomotives ran 211 miles a day on an average in 1943 and all freight service averages reached the highest level ever except "train speed" and "gross ton-miles per ton of fuel." These 1943 freight results are tabulated below:—

Wagon load	33.4 tons
Train load	1,116 tons
Net ton-miles per train hour	16,995
Wagon miles per wagon day	51
Wagons per train	52
Train speed	15.4 m.p.h.
Locomotive miles per day	125
Gross ton-miles per ton of fuel	17,573
(including locomotives)	

In the diagram reproduced at the foot of this page the year 1920 is represented by an index of 100 and one can see at a glance how each statistic has varied in the record peacetime year of 1929, in 1941 when America entered the war, and in 1943 at the peak of the war effort.

Unfortunately, railway taxes also attained a record height last year. Their burden has grown five-fold since 1938 and brought net railway operating income for 1943 below the 1942 figure. The rate of return on total property investment fell from 5.5 per cent. to 5.04 per cent. last year, but in 1938 it was no more than 1.43 per cent. After paying fixed and contingent charges, the railways were left with a net income of 962½ million dollars in 1943—a drop of 30 million dollars on their 1942 net income. In 1938, however, they had a deficit of 87½ million dollars, so that they have reaped substantial benefits from the phenomenal war traffic passing over their lines. The present prospects are that the extent of these benefits will now taper off rather sharply. An advance in the operating ratio from 61 per cent. to 67 per cent. in the first half of 1944 is ominous. Prudently, the American railways have been conserving their resources during the war years and, when peace comes, they should be in a strong position to protect their interests. In the meantime they have been wise to tell the story of their development without reserve.

PURCHASES—1923 TO 1942 INCLUSIVE
\$20,265,184,000



LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

Post-War Railway Passenger Travel

64, Plaistow Lane, Bromley,
Kent. November 3

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Might a member of the travelling public be allowed to state some post-war objectives in the field of railway passenger travel, which, though relatively cheap to achieve and free from the objections raised by Sir William Wood to more grandiose proposals, would do much to encourage railway travel among Britons and foreigners alike? The main needs as I see them are:

1. Real punctuality, to be assured by accurately calculated schedules and provision of sufficient relief paths; by longer platforms and enforced limiting of trains to capacity of stations used; and by restriction of "end access" coaching stock to trains making infrequent stops, where slower working can be tolerated.
2. Standardised times for steam services as well as electric.
3. Real through services to and from branch lines instead of loosely-timed connections, and exploitation of shortest available routes, for example, Paddington—Banbury—Kineton—Stratford-on-Avon; Birmingham—Rugby—Olney—Cambridge; Glasgow—Ardlui—Tyndrum—Oban.
4. Complete integration of adjoining stations, for example, at Oxford, Wrexham, Appleby.
5. Diversion of trains from a minor to a major station in the same town, for example, at Leicester (Belgrave Rd./London Rd.); Banbury; Stamford; London (Marylebone/St. Pancras). (Often the earthworks and even tracks already exist; elsewhere the change can be made on Sundays though not on weekdays, as already at Glasgow.)
6. Provision of bus terminals at railway stations as a matter of course, to form a travel centre in every town.
7. Joint advertising of rail and road services, using the 24-hour clock, in handy timetables.
8. Removal of anomalies from the railway fare system, and use of a sliding scale to produce lower rates for short distances.

Yours faithfully,

J. MACINNES, JNR.

The Midland Railway at Maidstone

Burgess Hill,
Sussex. October 31

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Among your numerous readers there will be some who call to mind the many rumours floating about in the railway world fifty to sixty years ago. A persistent rumour was that the Midland Railway was about to absorb the L.C.D.R. The march of time showed it was the L.T.S.R. that was the victim, but that was not until August, 1912.

Following quickly on rail connection between the Midland Railway north of the Thames and the L.C.D.R. on the Surrey side, the Midland opened coal depots on the L.C.D.R. under running powers, or by agreement in the suburban districts of the latter company.

The Midland Railway, however, in 1882 made a penetration considerably further afield. Many Kent towns are situate on the sea coast, and on the Thames. At that time these places received much coal by colliers, which also discharged cargo at Strood, which was carried up the Medway to Maidstone, a distributing centre for coal, and higher up the river.

The Midland, naturally, was not interested in this seaborne fuel, but in the carriage of the large tonnage of coal mined in the district through which this railway ran.

The L.C.D.R. line to Maidstone was opened on June 1, 1874, and ten years later was extended to Ashford, through a district not previously served by a railway. The always impecunious L.C.D.R. was ever ready to enter into agreements that would put funds at its disposal. In this case a willing participant was the Midland Railway, with the result that in May, 1882, the Midland Railway purchased from the L.C.D.R. land on the north (down) side of the latter's station at Maidstone.

The land had an area of about 5½ acres, bounded by the L.C.D.R. goods yard on one side, with the Medway, a main thoroughfare and the Barracks, respectively, on the other three sides.

This move of the Midland Railway was a bold one. An outpost 44 miles from its own system, with running powers for only 14 miles of this distance, Midland engines worked to and from Bickley.

The connecting line to the Maidstone site diverged from the L.C.D.R. down main-line immediately east of the bridge over the Medway by a facing connection. This line was L.C.D.R. property, and served that company's goods yard by a line branching out of it; both lines were used by the Midland Railway, became double before entering the Midland's property; one pair ran across the site to the boundary, ending a few yards from the barracks. The total length from the junction with the L.C.D.R. main line was about 220 yd., of which about 75 yd. was on Midland property. The second parallel double line was about 180 yd. long from its junction with the L.C.D.R. goods line; its length in the Midland yard was about that of the other pair (75 yd.).

Each line on this pair had turntables serving lines at a right angle; each of the first pair of the lines served by the turntables was about 44 yd. long; that of the second pair about 38 yd.

The Midland's property extended to the bank of the Medway, but there was a right of way along the river bank for the horses towing barges, men in charge of them, etc. In later years the frontage of the land to Sandling Road (the main road to Rochester) had buildings erected on it, except for the entrance to the coal depot and an allotment.

As to whether the Midland's coal traffic to Maidstone ever came up to expectations I have no evidence. But by November, 1900, of 34 daily Midland goods and coal trains tabled by the S.E.C.R., over the Chatham section, one train daily was to Crystal Palace or Bickley, and this ran only as required—conditionally.

Later, in S.E.C.R. goods working timetables that I have examined, I found only one Q (Conditional) Midland goods or coal train to and from Bickley, on weekdays and on Sundays. The timetable was for September, 1907. Those for June, 1919, and October, 1922, show no Midland trains. Any traffic for Bickley (for Maidstone) was probably worked to Herne Hill sorting sidings by the Midland trains, and worked thence to destination by the S.E.C.R.

But I must pass on to the climax. The grouping of railways under the Railways Act of 1921 resulted in the Midland Railway being one of several forming the London Midland & Scottish Railway. When the desire of various constituents that any particular offshoot of it should receive special treatment was unlikely to meet with the approval of the whole, unless it was a profit-making undertaking.

How long the L.M.S.R. executive took to arrive at the decision concerning the Midland Railway at Maidstone I do not know. But on March 22, 1934, the Midland Railway property at Maidstone was sold by auction in five lots, of which lot 1 was the most important.

This had an area of about 3 a. 1 r. 35 p. It included "the railway lines and tracks as laid, complete with four turntables, and weighbridge up to 8 tons." The property was freehold.

So ended the Midland Railway's experiment in the heart of Kent after a period of 52 years.

Yours faithfully,

G. A. SEKON

"A Protest at Railway Propaganda"

20, Yewstock Crescent East,
Chippenham, Wilts. November 6

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Now that the correspondence concerning the cover illustration of the July-August, 1944, issue of *The Railway Magazine* has changed from "protest" to critical comment upon the picture, perhaps I may be permitted to add a further note.

In view of the adoption by three out of the four main-line companies of upper-quadrant signals, is it not remarkable that this illustration shows a low quadrant arm? More than this, the artist has made a strikingly accurate representation of the arm and spectacle used on the Furness Railway. With this is combined the flat-topped finial also in use on that railway. The shape of both the spectacle and the finial were so distinctive that it seems beyond coincidence that an artist should so realistically portray the two details, in combination, by accident.

If indeed the drawing was made from a photograph of an old Furness Railway signal, the choice was a strange one.

Since writing the above I have read the further correspondence on this subject in your issue of November 10. Although the origin of the picture is now revealed, the artist, in working from the official photograph, has made four slight alterations, insignificant in themselves yet together combining to produce a signal far more like the Furness pattern than that of the L.N.W.R.

1. The pointed top of the finial, clearly seen in the photograph accompanying Mr. Lascelles's letter is not visible in the official picture, and the artist has omitted it.

2. The spectacle glasses are shown lower, with the green coming in front of the post.

3. A wooden arm has been substituted for the corrugated L.N.W.R. pattern.

4. The white band is placed noticeably nearer to the outer end of the blade.

The only jarring note is the ladder. The Furness rarely used them, for even on short posts they used lamp winding gear, with a series of short rungs for a man to climb the post on the rare occasions this was necessary.

Yours faithfully,

O. S. NOCK

[As the objective of this poster was to convey that "the signal is against holiday travel this summer," the arm would be shown in the horizontal position whatever the form of signal. When the "right away" is given, there may be something in the argument for adopting an upper quadrant signal, although the use of what is still in the public mind the "conventional" signal would probably be justified in a poster designed for popular appeal. In our view the design was realistic and effective, accurately portraying what the public regards as typical.—Ed. R.G.]

British Railways—Facts and Figures

London, November 11

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Mr. F. S. Edwards in his letter of October 30 misquotes you. The aggregate of goods and passenger train miles before the war and for 1943 were not given by you, or in the document from which you quoted. No one who has any knowledge of railway conditions would add these two types of miles together for the purposes of comparison of effort, but Mr. Edwards does so and then proceeds to decry the railway effort during the war. He ignores completely your figures in the same article which show that with 29 per cent. fewer passenger-train miles there was a 70 per cent. increase in the use of the trains by passengers, or passenger miles, this apart from the growth of merchandise, etc., carried in passenger trains. Similarly, he ignores a 31 per cent. increase in the loaded wagon miles run (and the weight carried in the wagons also increased) and a decrease of 13 per cent. in the loaded freight train miles. The combination of the factors of increased loading and decreased miles show an increased traffic per passenger train mile, ignoring merchandise, etc., of 140 per cent., and per freight train mile, ignoring heavier loads in wagons, of 50 per cent. The reasons why, with this huge increase of traffic, Mr. Edwards thinks traffic operation is easier are obscure, but perhaps he was thinking of train and road vehicle miles as having the same meaning and weight.

I am glad that each week Mr. Edwards reads "of the marvellous feats of the railway" but regret that he, unlike railwaymen, sometimes almost forgets that soldiers are in the war too. Nor do railwaymen forget the part played by others as well as the soldiers—airmen, the Navy, the Mercantile Marine and other forms of civil transport.

"Engineer" in your same issue points out one reason why passenger trains are slower—short platform lengths requiring more than one stop. Other reasons are: The withdrawal of many fast long-distance trains because the locomotives and carriages are being used for other purposes, the additional time taken at stations owing to overcrowding of passenger trains, the greater volume of non-passenger traffic now carried, the change in the flow of traffic, a huge increase in trains not run for members of the public at times which often cut across the regular services, and shortage of station and train staff. In his reference to platforms, "Engineer" states that they could readily be extended with concrete castings and that this is easy and cheap. Manpower and material supplies make this not easy. "Cheap" is a relative term, but it would hardly be suggested that wholesale lengthening of platforms to meet wartime conditions would, if physically possible, even justify the capital out-

lay by the railway companies. There are stations where the number of passengers has been multiplied, temporarily only, to ten times pre-war level and it would be a wasteful disposition of railway companies' funds to spend money on lengthening platform forms, even if that work were not in competition with platform schemes in hand at the outbreak of war which have had to be postponed for non-railway reasons.

Yours faithfully,

CONSTANT READER

Station Name Boards

19, Stumperlowe Mansions, Fulwood,
Sheffield, 10. November 1

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—With reference to the suggestion that station name boards should be set at an angle, it is surprising that no one has pointed out that a number of L.M.S.R. stations actually have such name boards.

Moreover, it is not necessary to go to the Egyptian State Railways to find an example of the "double" name board, with the names repeated at angles to suit the passenger sitting either with face or back to the engine. Such name boards were common on the former Midland Railway.

Still more curiously, a number of these boards has been removed and replaced by the smaller standard L.M.S.R. name board of the single type set at an angle, which, as Mr. Grasmann quite logically points out, is inconvenient for passengers with their backs to the engine, unless they are sitting on the right-hand or "off" side of the train.

A point which the Railway Companies Association Commission on Post-War Planning might bear in mind is the standardisation of station name boards, as to size, colour, and position. Variety only confuses the passenger and confers no benefit on the railways.

Yours faithfully,

M. R. BONAVIA

"Helpful Hints to Those Who Follow"

No. 2 Railway Operating Group,
Royal Engineers, October 29

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—In your issue of September 22 in the "Scrap Heap" appeared a short article entitled "Helpful Hints to Those who Follow" by "Flats."

For your information, the original article was printed as a humorous skit on Iranian Railway working in March, 1943, in *The Red Flag*, a magazine published by 153 Railway Operating Company R.E. during the period it helped to work the Trans-Iranian Railway supply line to Russia, and was reprinted for the benefit of the U.S. Transportation personnel who took over early in 1943. Without such an introduction, most of the points made by "Flats" are unintelligible to the ordinary reader; although the author's imagination has run riot in parts, most of the difficulties mentioned actually did occur. For your information, the following glossary is appended:—

burro	-	go!
Crosspel	-	two trains to cross at PEL Station
mush	mush	sleep
nisht	-	not, no
GOM	-	The city of QUM or GHOM
ARK	-	ARAK or SULTANABAD
Oifit	-	Fitted oil tank
TRN	-	Tehran

The author was Captain I. M. Loder, R.E. (G.W.R.), who was at that time with 153 Railway Operating Company and is now serving in C.M.F.

Yours faithfully,

A. E. FAIRHEAD,
Lt.-Col. R.E.

Publications Received

The Railway Pattern of Metropolitan Chicago.

By Harold Melvin Mayer. Chicago, Illinois: Published by the University of Chicago (Department of Geography). 9 in. by 6 in. 168 pp. + folding maps. No price stated.—It is noteworthy that various Universities in the U.S.A. have given considerable attention in recent years to transport as a subject for theses, with the result that many essays of interest and importance, but without commercial justification as publications, have been placed on record. The present book is the text of a dissertation submitted to the Faculty

of the Division of the Physical Sciences in the University of Chicago in candidacy for the Degree of Doctor of Philosophy. It appears that the gathering of material, which the author began during the winter of 1939-40, was interrupted by the movement of military supplies through Chicago, and the consequent limitations imposed by the railways upon access to their properties and records. It was afterwards found possible to resume the work, and we have here a study, generously annotated, of the development of railway passenger and goods facilities of an extraordinarily complex and important kind. The method of production is apparently by means of lithography, and

is based on photographically-reduced pages of typewriting.

Ideal Factory Heating.—We have received from Tangyes Limited, Cornwall Works, Birmingham, booklet No. 614, illustrating its patent heating stoves which it claims are ideal for factory heating. The 16 pages show various types, dimensions, heating capacity, and prices of stoves and spare parts. From the illustrations and the list of spare parts, it is apparent that this stove is simple in construction and easy to maintain, and the large number of users throughout the country bears testimony to this.

The Scrap Heap

WRONG DAY FOR TRANSPORT STRIKE
Buses around here always strike on Saturdays, when I don't go to school.—
Juvenile at Hendon.

SEAL WITH AN URGE TO TRAVEL

Railway officials at Easttriggs station, Dumfriesshire, had a shock when they saw a young seal making its way along the main line leading south. It could not be coaxed to step up to the platform, so a rope had to be tied round its neck, and the seal was dragged back to the Solway Firth.

GERMAN RADIO DESTROYS EUSTON STATION
"Euston Station was destroyed in mid-October, and London police ruthlessly drew a cordon round that part of the town to stop sightseers. Everybody concerned was ordered to keep strict silence."
—German Forces Radio.

RAILWAY APHORISMS

A root principle of railway charges is not to charge what the traffic can bear.

Civil engineers can only lay special claim to be engineers.

Stockholders who are above dividends never lack interest.

The business of railways, unlike the business of life, is to go backwards as well as forwards.

General managers are never so happy as the rank and file fancy them.

A British railway is never fit for company; the passengers see to that.

Canteen maketh a full man; committee a compromising man; and trade union a conservative man.

It may be better to travel hopefully than to arrive, but a railway driver has to be sure and punctual.

A weakness of the railway is its history. Freight is a refined way of saying that a person has had a great shock.

There are two kinds of steam engine: those that run on wheels and those that wear trousers.

Railway life will be a progress from want to want, whatever social security there is.

A. J. P.

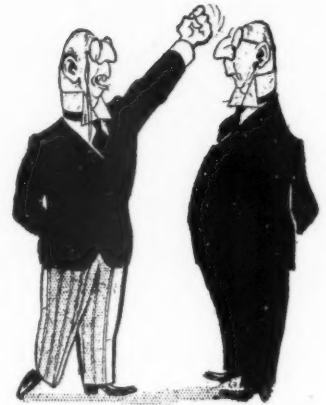


British artist's impression of a railway assembly shop, one of the branches of the U.S. Transportation Corps in Great Britain. The reproduction is from a scratch-board drawing by Evelyn Cooke

COMMON USER OF SEASON TICKETS
Said to have had three "seasons" and to have rung the changes on them so that five members of the family used them, defendants named Angel were summoned at Southend recently for rail bilking. Mrs. Sarah Angel, the mother, was fined £4 with two guineas costs; Yetta Angel, £4 with two guineas costs for aiding and abetting; Kitty Angel, £4 and two guineas costs for travelling and attempting to travel; and Max and Abraham Angel, £2 and one guinea costs each for aiding and abetting.

FORCES' ENGLISH

We have received the following letter from a member of our editorial staff who is at present in the Forces, and dealing with the preparation of booklets for a Government department:—"Our so-called editor here has purchased a book entitled 'Use and abuse of Official English,' and works with it propped in front of him. He weighs each phrase in a manuscript with the principles of composition stated in the book, and this does not expedite the sending of copy to the printers. I have just deposited 33,000 words on him and he has kindly said that he will 'go through it for me.' This will occupy a fortnight or so, every alteration he makes being preceded by a lengthy discussion in which I am an unwilling participant. Eventually, when there is nothing for it but to get the matter set, he will gain a little more time by suggesting numerous futile amendments to the drawings. In three months' time we may see page proofs, whereupon panic will again seize the editor and he will begin proposing amendments to blocks, such as cutting holes in them to drop in further annotations in type. He will also find that in his preoccupation with the 'Use and abuse of Official English' he has forgotten to sub the copy for ordinary points of style, so that approximately alternate lines have to be re-set for the sake of capitals, italics, and so on. To avoid the danger of a writer conforming to style himself, and so making some of the duties of the editorial department seem superfluous, the style is



"By Jiminy, Entwistle, if they try to close us down, this Ministry will fight 'em in the corridors, on top of the filing cabinets—and in triplicate, if necessary"—by NEB
[From the "Daily Mail"]

changed every few weeks, but the changes are carefully concealed from the authors."

RAILWAY STOCK HOLDINGS

The total amount of stock issued by the four main-line railway companies at December, 1943, was £1,108,952,476, and the total number of holdings in August, 1944, was 1,136,980. In a recent series of articles published in *The Financial News*, the percentages of holdings of various amounts were given. From this it would appear that the following table represents approximately the number of holdings of varying nominal amounts of railway stocks:—

Amount	No. of holdings
£100 or less	198,975
£100 to £200	188,742
£200 to £300	130,755
£300 to £400	89,823
£400 to £500	111,426
£500 to £1,000	210,345
£1,000 to £5,000	78,920
£5,000 to £10,000	121,055
Over £10,000	7,959

STOLE FROM RAILWAY

A G.W.R. carter, was at Maidenhead this week fined £20 for stealing five tins of salmon from cartons which he was delivering. "There is far too much pilfering on the railways," said the Chairman of the Bench. "Only the fact that you have lost your job after 15 years' good railway service has saved you from going to prison."

TAILPIECE

(The need for salvage is still urgent)

Be it winter, be it spring,
When the noise of battle wanes,
Guns are quiet, joybells ring,
Whatsoever be our gains,
One necessity remains.

What remains? The need to save
Overplus of bone and rag.
Peace or war, we still must have
Rubber scrap and metal tag,
Envelope and paper bag.

Is it winter, is it spring?
Even Churchill cannot say
When the bells of peace will ring.
So be prudent, come what may.
Save—today and every day!

E. C.

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

SOUTH AFRICA

Non-European Staff Organisation

The Minister of Transport met recently in Johannesburg representatives of the non-European staff of the railways; the organisation of properly-constituted staff associations for non-European staff, wage increases, and improvements in service conditions were discussed. The Minister stated that nearly £900,000 a year would be required to give effect to the proposals. He said that there would be higher rates of pay for overtime and Sunday time. Expenses to non-European servants when absent from their headquarters in the execution of their duty had been improved by approximately 100 per cent. in most cases.

On an earlier occasion, the Minister had emphasised the importance of railway employees being represented by organisations devoted to their interests, with which he, as Minister, and the General Manager could discuss any problems which might arise. It had been decided, he said, that the non-European staff associations should be on a system basis, as at present it was difficult for an organisation to work in any other way.

Once an association had been established and recognised by the Railways Department, that association only would be considered as representative of the non-European staff on any particular system. Recognition of an association would not necessarily be refused merely because it was not registered under the Industrial Conciliation Act. A union would be recognised, however, only if it were fully representative of the non-European staff of the area, and only after such a union and the Railway Administration had agreed to the terms of recognition.

Railway Employment for Soldiers

More than 1,250 discharged soldiers have been given employment on the railways, and many railway servants who went on active service are back to work. Discharged soldiers are being employed on the temporary staff in various learner positions, such as ticket examiner, checker, shunter, clerk, timekeeper, and storeman. They are given full credit for their Army service (see also *The Railway Gazette* of October 20).

UNITED STATES

New Locomotives

The modern American policy of reducing to a minimum the number of locomotive types, to simplify the work of manufacturing, is seen in the recent acceptance by the Lehigh & Hudson River Railroad of three 4-8-2 freight locomotives of a type built first in 1941 by the Baldwin Locomotive Works for the Boston & Maine Railroad. Each of these engines has two 28-in. x 31 in. cylinders; 6-ft. 1-in. driving wheels; 4,511 sq. ft. evaporative heating surface, and 1,887 sq. ft. superheating surface; 79 sq. ft. firegrate area; and a working pressure of 240 lb. per sq. in. The piston-valves, of 14 in. dia., have a maximum travel of 7½ in. At 85 per cent. working pressure the rated tractive effort is 67,200 lb. Adhesion weight is 120 tons, and the weight of the engine in working order is 187 tons; the tender, which is of the Commonwealth 14-wheel type, accommodating 23,000 gal. of water and 21 tons of coal, weighs 145 tons when two-thirds loaded. A variety of modern equipment is

provided, including low-water alarms, clear-vision windows and windshields for the cab, coal sprinklers and rail washers. The locomotives are intended to make a 200-mile round trip daily, over heavy gradients, with trains of 3,200 tons.

The Richmond, Fredericksburg & Potomac Railroad has obtained ten 4-8-4 locomotives from the Baldwin Locomotive Works.

The Virginian Railway order for eight heavy articulated freight locomotives of the 2-6-6-6 type has been placed with the Lima Locomotive Works (it was reported in *The Railway Gazette* of September 22 that the company had made an inquiry for eight locomotives of this type).

Railway Communication Experiments

Three more railways are reported as having radio communication under test. The New York Central System is providing in the westbound classification yard at Selkirk, N.Y., apparatus manufactured by the General Railway Signal Company, which will be installed on three yard locomotives and in the hump marshalling-yard office, and operated under experimental licence.

The Chicago, Milwaukee, St. Paul & Pacific Railroad, has under test the inductive system of train communication of the Union Switch & Signal Company. Unlike radio, the inductive system requires neither wave-length assignment nor licence. A carrier current, transmitted through the rails and through wires carried on the ordinary lineside poles, is received by induction, and permits conversation between drivers and guards of trains, and between both of them and fixed transmitting and receiving stations, as well as with the crews of other trains.

The Seaboard Railway has been making tests over its main line between Richmond, Virginia, and Miami, Florida, of the radio receiving and transmitting units of the Bendix Aviation Corporation, permitting conversation between the front and rear ends of lengthy freight trains. Successful results are stated to have been achieved.

Seaboard Signalling Contract

The Seaboard Railway has placed with the Union Switch & Signal Company a contract for the materials required to equip 269 miles of its south-western main line between Monroe, North Carolina, and Howells No. 2 interlocking plant near Atlanta, Georgia, with absolute permissive block signalling. The order includes colour-light signals, switch circuit controllers, and all other accessories.

Closing Duplicate Lines

Applications are being made by various railways to the Interstate Commerce Commission for permission for the closure of lines which run parallel to the tracks of other companies, over which running powers are sought. The purpose is by friendly arrangement to reduce duplication of track maintenance where one of the two tracks concerned is sufficient to handle the traffic of both. For example, the Chicago, Burlington & Quincy Railroad is seeking running powers over 53 miles of the Chicago Great Western Railway between Burch and Talmage, Iowa, and authority to abandon its own line between Burch and Osceola, as well as to lay in the necessary connection at Talmage. The Kansas City Southern Railway, the line of which between Fort Smith and Spiro, Oklahoma, was damaged by washouts on April 30 last, and which since has been operating over 28½ miles of

the St. Louis-San Francisco Railway between Porteau and Fort Smith, is applying for authority to make the arrangement permanent.

ARGENTINA

Railway Tourist Advertising and Provincial Governments

For some time it has been the policy of the Central Argentine Railway to enter into close contact with the tourist-development departments of the Governments of the provinces of Córdoba, Tucumán and Santiago del Estero, in connection with joint propaganda campaigns. This policy has not been suspended entirely, in spite of present difficulties, as it is considered wise to keep the various resorts in the public eye, with the object of being in a position to develop post-war traffic. Indeed, the idea recently was taken a step further when the Central Argentine Railway, in conjunction with the State Railways, the Government of the province of Salta, and other organisations, conducted a short campaign to make popular the attractions of the province named, a step which has been justified by its success.

A similar policy is carried out by the Buenos Ayres Great Southern Railway, but in that instance co-operation is with such local tourist organisations as those of Mar del Plata, Necochea and Miramar.

CUBA

Underground Suggested for Habana

Habana, Cuba, now has a population in its metropolitan area of about 1,000,000 inhabitants, but the heart of the city consists of narrow winding streets flanked by a variety of ancient buildings, and its traffic problem has become acute. There are practically no arterial highways for motor traffic, and surface traffic improvement is virtually impossible without the widespread demolition of thousands of properties which is not considered feasible or economically sound.

Consequently, an ambitious underground railway system has been proposed, the cost of which is estimated at \$200,000,000 to be spread over a 10-year period. This is stated to be the only feasible solution of the problem, as it would provide a rapid passenger service from various directions to the heart of the city, and assist in suburban development by bringing even outlying areas within half-an-hour's run of its financial, commercial and industrial centre. It would connect with existing surface suburban lines, and enable thousands now housed in crowded and unhygienic dwellings to move out to modern houses on the outskirts of the city.

One section of the underground is projected to pass under the harbour to connect with the Guanabacoa railway beyond. Under much of the city the subsoil is soft and parts are reclaimed land, but even so it is estimated that the cost will be considerably lower per foot run than the New York underground line through Manhattan rock.

CEYLON

Bangadeniya-Puttalam Road Service

The road-transport service maintained by the Ceylon Government Railway between Bangadeniya and Puttalam since the discontinuance of the train service on the section nearly two years ago is resulting in a loss. An investigation is proposed in this connection. The road-transport service is given out on contract to a haulage undertaking which has to abide by conditions laid down by the railway.

The Human Element in Transport*

Some considerations advanced by Mr. Robert Kelso in his Presidential address to the Institute of Transport

MR. ROBERT KELSO, in his inaugural address to the Institute of Transport, commenced by dealing briefly with the pre-war competition of which he had had experience as a shipowner, partly in the coastwise trade around Great Britain, and partly in the trade between London and the Continent of Europe. This competition had extended from canals to railways and ports, and had been manifest between country and country, between port and port, and between railway and railway. Dealing with the ships which carried the goods between the Continent and Great Britain, it was interesting to note that for some years before the present war, not only the French, but also the German, Italian, Russian, and Dutch Governments had given substantial support to the vessels flying their flags. British liners had received no State help, but he hoped that the British Government in the future would find a way to counter any attempt of unfair subsidising on the part of foreign States. Although the conference system of operation providing for pooling and division of receipts on some basis or other had had the result somewhat of levelling out receipts for all, this circumstance had not reduced competition between the lines to obtain the shippers' traffic. This spirit of competition and emulation had drawn the best out of the staffs, both afloat and ashore.

He was aware that to bring devices like pools into the business of free enterprise was to run the risk that partners in the pool might slacken their efforts. The result would be that the more energetic lines would have to carry the less energetic on their shoulders; that the financial result to all lines would be less favourable and that the country would suffer from a lowering of efficiency in days when its commercial success and perhaps even its commercial survival would depend on everyone putting out his best effort.

This was not an argument against pools, but in favour of being sure of the right kind of pool, one that left alive—and if possible strengthened—that spirit of competition and emulation without which the essentially necessary incentive and spur to constant improvement could not exist.

Turning to the internal transport of this country, during the war all the different forms of transport—rail, road, coastal shipping and canal—had been used as if they formed one system; each had been used for the job it could do best. Road was no doubt an exception, as, through no fault of its own, its use had been curtailed by shortage of petrol and rubber. Quite apart from the collaboration due to war, a striking movement towards unification in recent years had been noticeable within each form of transport. It could be said that the four main railway companies were operating practically as one. Endeavours were being made by the road industry to get more unification among its numerous members. Coasting liner companies in recent years had been doing a lot to eliminate, or reduce, unnecessary duplication in ships' offices, staffs, berths, etc. With canals there was a similar movement.

Most would agree that in internal transport the aim should be so to utilise all forms

of transport that the aggregate cost to the country was reduced to the lowest possible figure, though strategic and other considerations would be a disturbing factor. If rail, road, canals and coasting shipping were asked their views, he thought that they might make the following remarks.

The railways would claim that pre-war they were obliged to carry the lion's share of the raw material of industry at rates that did not fully cover running and maintenance costs. If so, they were subsidising out of their own pocket what should have come out of the Government's pocket. Road would claim that the restrictions imposed by Governmental licensing rules hindered roads' progress, and they would probably hotly contest the complaint made by their opponents—that road has never paid its fair share of the cost of the highways used by them. Canals would complain that their existence was forgotten. Coastwise shipping would point out that, unlike rail, road and canal, their track (the sea) cost nothing either in first cost or in maintenance, and they think it would in the national interest be foolish to ignore the advantage this circumstance gave them in supplying cheap transport. Coastwise shipping would also claim that the greater the distance goods were carried by any form of transport, the higher the cost must be, and they therefore objected to the system of flat rates adopted by the railways.

The important question of the future shape of the internal transport of this country had been much studied and spoken and written about. He gave a short synopsis of some of the views expressed during the last year or two:—

Sir Osborne Mance advocated a pool of fixed costs, and competition for the other costs.

Sir William Wood advocated a system of co-related charges, not necessarily uniform, with competition in service but not in price.

Articles in *The Times* in September advocated a reconciliation of the differences in fixed costs as between the different forms of transport, and suggested that all subsidised transport charges should be abolished.

The *Economist* suggested that transport concerns should remain financially independent, but linked—on the "capital" side—in a national pool, of which the State, as owner of road tracks, would be a member. It advocated complete technical integration on operational functions.

Sir Arthur Griffith-Boscawen proposed alternatives, either to give the railways the "Square Deal" proposed in 1939 and then see what co-ordination could be effected with road interests, or to unify all forms of transport under a public board or Government Department.

Mr. Roger W. Sewill said that, first, the Government should state its ideas as to strategic requirements for transport and on the subject of the location of industry, and then transport interests should draft schemes of co-ordination on the lines of the previous recommendations of the Transport Advisory Council.

The Labour Party favoured compensating owners on a fair and reasonable basis and nationalising all transport, administering it through a national board controlling separate boards for each form of transport.

The F.B.I. and Associated Chambers of

Commerce had no radical solution beyond an inquiry into the equity of the fixed burdens placed on different forms of transport, but thought the railways could do much internally to improve efficiency and reduce costs by revising their wagon and train loading methods.

It was interesting to note that all these suggested solutions dealt with the material make-up of the industry and its administration and operation—all important matters. None mentioned a factor quite as important, namely, the human element involved.

What striking illustrations were had during the war, not merely in the army, but also on rail, road and sea, of what men could do when inspired with a sense of doing it for a cause worthy of their best effort. Railwaymen had performed prodigies in repairing damage and carrying on their work in spite of the blitz.

No solution of post-war internal transport would be satisfactory if it confined itself to the mechanics of the problem and to a set-up for administration and operation while leaving out of consideration the most vital factor of all, namely, the spirit of the men who had to do the work. Proper living conditions and pay would have to be provided, but the proper sense of pride in doing one's work well did not depend only on comfort and pay. More was required. In short, it was the family feeling which should prevail and which existed and always had existed in most of the old transport companies. If nationalisation would create this feeling of loyalty and inspire men to their best effort, and if it would do this more certainly than any other system, then nationalisation should be welcomed. If some kind of public board would do this still better, that was a great point in its favour. If, on the other hand, loyalty and maximum effort were more readily found in the ranks of the companies who had been running for years on the basis of free enterprise, this important fact should be well borne in mind, and the Government should think long and gravely before it decided to abandon such a source of loyalty and efficiency.

RAILWAY AIR SERVICES.—The new air service between London and Liverpool, opened on Monday last, November 13, is the first civil air service between the two cities since the outbreak of war, and the first from the Metropolis. It makes direct connection at Liverpool with new flights to Belfast, and also with the Liverpool-Ronaldsway (Isle of Man) route of Isle of Man Air Services. The journey time between Croydon and Liverpool is 1½ hr.; between Croydon and Belfast 3½ hr.; and between Croydon and the Isle of Man 2½ hr. Passengers for Belfast passed through security formalities at Speke Airport, Liverpool. Transport between the West End and Croydon Airport is provided by London Transport coaches; at Liverpool, the road service between the City Terminal and Speke Airport is provided by Crosville Motor Services Limited. In a statement to the press, Sir Harold Hartley, Vice-President of the L.M.S.R. and Chairman of Railway Air Services Limited, said that post-war plans visualised an annual R.A.S. mileage of 20 million aircraft miles; the operation of 34 internal routes; and services to about 100 continental cities. It was intended to buy British aircraft as soon as it was possible to do so; 12 seaters of 160 m.p.h. cruising speed were desired for feeder services, and 25 seaters of 200 m.p.h. for trunk routes.

* An abridged report of the address delivered on November 13 before members of the Institute of Transport at the Institution of Electrical Engineers, London, W.C.2

THE RAILWAY EXECUTIVE COMMITTEE—I

Development of liaison machinery between the Government and the main-line railways—The Railway Technical Committee on Air Raid Precautions—Formation of the advisory R.E.C. and preparation of its headquarters

FOR three-quarters of a century liaison machinery has existed to provide close co-operation between the Government and its Service Departments on the one part, and the British railways on the other, regarding such matters as mobilisation of the Forces and priority transport of essential supplies in the event of war. In 1866, timetables for special troop trains were compiled by the railway companies, and from that time mobilisation and other emergency timetables were prepared and revised periodically. Eventually, in November, 1912, a Railway Executive Committee was formed and was charged with the duty of carrying through all necessary war preparatory work and holding itself in readiness to undertake control on behalf of the Board of Trade of such railways as the Government might take possession in the event of an emergency. When war broke out on August 4, 1914, the undertakings of 130 railway companies passed under the control of the Government, but continued under their peacetime managements, subject to the general direction of the R.E.C., to secure the operation of Government traffic as if on a unified system. The control was exercised under Section 16 of the Regulation of the Forces Act, 1871, empowering the Secretary of State to take possession of the railways. Under the terms of the Act, the warrant was valid for one week only, but it was made clear to the railways that this would be renewed from week to week, until further notice. Immediately after that war, the Ministry of Transport was formed by Act of August 15, 1919, and the formal transfer to the new ministry of the transport functions of the Board of Trade took place on September 23, 1919. The life of the R.E.C., as a department of the Board of Trade, thus came to an end, but the new Minister (Sir Eric Geddes) asked the R.E.C. to continue to serve "for the next week or two," and it ceased to function at the end of 1919. Control of railways continued, and the R.E.C. was succeeded by a Standing Committee of General Managers, which, however, was only an advisory body and had no executive powers over the controlled railways. Control ceased at midnight on August 15-16, 1921, and four days later the Railways Act of August 19, 1921, with its provisions for grouping received the Royal Assent.

The Railway Companies' Association

The resultant formation of the four British main-line railway companies, and the establishment in 1933 of the London Passenger Transport Board, so reduced the number of operating units that many of the arrangements necessary before and during the war of 1914-19 have no counterparts at the present time. Within recent years the Railway Companies' Association has been the organisation through which the Government has communicated with the main-line railway companies in order to discuss matters of national policy. This body is a purely voluntary association and had its origin in a committee formed in 1854. As a result of the amalgamations effected under the provisions of the Railways Act, 1921, the number of member companies of the association was reduced to four, namely, the London Midland & Scottish, the London & North Eastern, the Great Western, and the Southern Railways. This smaller membership enabled the council of the association to be dispensed with, and from that time each of the four amalgamated companies has been represented on the association by its Chairman, Deputy-

Chairmen, General Manager, and Solicitor. It was through this association that preliminaries were conducted between the Government and the main-line railway companies, preparatory to the formation of the present Railway Executive Committee.

For practical purposes, the transport preparations for the present war may be dated from the latter part of 1937 when it became obvious that the European situation was trending in a direction which made a conflict between major powers a risk of the near future. It was then that steps were taken to see how far special preparations were necessary to ensure the continued operation of the British railway system in the event of hostilities, of which the possibility of intense aerial bombardment might be expected to be an outstanding characteristic. At the request of the Government, therefore, the railways considered what protection should be afforded to enable the British railways to carry on their services as efficiently as possible in the event of such an emergency.

Railway Technical Committee on A.R.P.

Accordingly the Railway Technical Committee on Air Raid Precautions was set up under the chairmanship of Mr. V. M. Barrington Ward of the L.N.E.R. and composed of the following:—

Mr. H. A. Strutt (Home Office)
Colonel A. J. G. Bird (Home Office)
Lt.-Colonel A. H. L. Mount (Ministry of Transport)
Colonel A. H. C. Trench (Ministry of Transport)
Mr. G. S. Hussey (L.M.S.R.)
Captain J. O. N. Wood (L.M.S.R.)
Mr. F. H. D. Page (G.W.R.)
Mr. G. Matthews (G.W.R.)
Lt.-Colonel G. L. Hall (Southern Railway)
Mr. H. E. O. Wheeler (Southern Railway)
Mr. F. G. Maxwell (London Transport)
Mr. H. J. Green (London Transport)
Mr. A. L. Lunn (London Transport)
Mr. E. H. Beal (London Transport)
Mr. H. L. Buckman (London Transport)
Mr. T. S. Roberts (L.N.E.R.)—Secretary

The Railway Technical Committee held its first meeting in December, 1937, and examined the problem from three main angles, namely, protection of personnel, protection of vital points, and the additional stocks of material required for emergency repairs to be effected speedily. The advice of the Air Raid Precautions Department of the Home Office was sought as to the type of protection to be provided, and in close consultation with the representatives of that Department, and of the Ministry of Transport, a schedule of protective works was prepared, with costs on an agreed basis, for submission to the railway managements and the Government Departments concerned. Ten meetings were held by the Railway Technical Committee and detailed minutes were submitted periodically to the General Managers and to the Government representatives. Eventually a summary report dated June 22, 1938, was prepared and was unanimously agreed by the members of the committee, at whose request it was signed on their behalf by Mr. Barrington Ward.

Operation of Services during Air Raids

The Home Office and the Ministry of Transport expressed the opinion that, so far as possible, traffic should be kept moving even during the progress of an air raid. A standstill order was in force in the early stages of the last war, but was abandoned before the end. In view of the real

need for maintaining essential railway services in such an emergency, it was not considered advisable to bring all traffic to a standstill on receipt of an air raid warning. A Sub-Committee of Operating Superintendents considered this question, in conjunction with the Ministry of Transport, and agreed that, in principle, traffic should be kept moving during air raids, subject to the following general instructions. On receipt of an air raid warning, passenger trains should be stopped at the first station, where passengers should be warned, and those who so desired given an opportunity to alight and disperse, while the train itself should proceed on its journey with caution at a speed not exceeding 15 m.p.h. Under similar conditions, freight trains should be stopped at the first signal box and the driver warned to proceed cautiously at a speed not exceeding 10 m.p.h.* It was realised that, in the event of a sudden emergency without warning, arrangements would have to be left to local initiative. Detailed emergency instructions to the staff were drafted accordingly, and communicated to all concerned.

Railway Protective Works

The important decision to continue to maintain services during an air raid of course had a fundamental effect on the form and extent of the protective works to be provided. The railway companies agreed, as a general principle, that new works such as power stations and signal boxes erected in vulnerable areas should be constructed on the lines approved for A.R.P. requirements. With the existing railway system, estimates were prepared of the cost of protecting personnel, both on "good employer" grounds, and also to enable staff to continue essential work during air raids. Protection of property was dealt with under the separate headings of administrative and control centres; signal boxes; and power stations and substations. Separate consideration was given to the provision of additional supplies for emergency repairs that would be undertaken in the three main sections of civil engineering; signal and telegraph work; and mechanical engineering (mainly extra spare parts for steam locomotives). Further emergency provisions included extra telephone connections with G.P.O. circuits, and the addition to existing stocks of steam breakdown cranes, welding and burning plants, and so forth.

The tube railways of the London Passenger Transport Board, and electrified sections of main-line railways, presented special problems. Tube lines required protection, and the ventilation had to be safeguarded against poison gas. With surface electric railways it was considered desirable to make arrangements for the replacement at short notice of electric traction by steam traction. Even the minimum immediate expenditure which the Railway Technical Committee considered essential for affording a reasonable measure of protection to the railways against aerial attack, was far in excess of any sum which the railway companies found themselves able to meet pending settlement with the Government of the financial question as to who was to bear the cost. It was therefore pointed out to the Government that no effective steps could be taken towards the execution of the work, much of which would require many months to complete, until an indication was given of the Government attitude towards railways in the event of war.

Formation of the Railway Executive Committee

At the time of the Czechoslovak crisis of September, 1938, the Minister of Transport appointed the Railway Executive Committee, under an instrument dated September 24, to

* The severe speed restrictions during air raids in the early part of the war were lifted as a result of experience from November 11, 1940

advise the Government in connection with arrangements necessary in conditions of emergency. The text of this historic document is as follows:—

Defence of the Realm

Appointment of the Railway Executive Committee

The Minister of Transport hereby appoints the Railway Executive Committee, consisting of:—

Sir James Milne, K.C.V.O., C.S.I.
Mr. Frank Pick.
Mr. Gilbert Savil Szlumper, C.B.E.
Sir Ralph Lewis Wedgwood, C.B., C.M.G.
Sir William Valentine Wood,

with Mr. G. Cole Deacon as Secretary, to advise His Majesty's Government in relation to all or any of the undertakings of the railway companies of Great Britain and of the London Passenger Transport Board with a view to securing that in a national emergency the powers and duties of the undertakers are exercised in the interests of the public safety, or for maintaining supplies and services essential to the life of the community. This appointment shall continue in force until revoked or amended by writing under the hand of the Minister of Transport or of the Secretary or Deputy Secretary or an Assistant Secretary of the Ministry of Transport.

Signed by order of the Minister of Transport this 24th day of September, 1938.

R. H. HILL,

Authorised by the Minister

After the crisis passed, and the Munich settlement was reached, the Minister of Transport expressed by letter his desire that the R.E.C. should continue to function so that preparations might be made against any emergency arising in the future. The R.E.C. continued in existence as an advisory body until September, 1939, when the Government assumed control of the railways. In September, 1938, the R.E.C. appointed the following consultative committees:—

Solicitors
Goods Managers
Passenger Superintendent (Coaching)
Mineral Managers
Operating
Civil Engineers
Mechanical & Electrical Engineers
Signal & Telegraph Engineers
Accountants
Surveyors
Staff
Stores
Statistical

To these were added the following:—

Docks (in February, 1939)
Sabotage (in March, 1939)

R.E.C. Headquarters

When the Railway Executive Committee was formed as an advisory body in September, 1938, it was visualised (as indeed the title indicated) that this committee would assume important executive functions in the event of Government control of railways in war conditions. Thus, the need arose for adequately-protected headquarters to be provided, from which the R.E.C. could operate even during severe aerial bombardment. The original scheme was to strengthen the basement of Fielden House, 10, Great College Street, Westminster, S.W.1—the headquarters of the Railway Companies' Association since October, 1937. The owner of this building is Lineside Estates Limited (a subsidiary of the L.M.S.R.), and Mr. W. K. Wallace, the Chief Engineer of the L.M.S.R., therefore examined the basement of Fielden House. He found, however, that to make a satisfactory job of strengthening this in such a way as to make it suitable for use as the R.E.C. headquarters would be very expensive, owing to the levels of the basement in relation to high water in the adjacent River Thames, and the location of water mains and sewers close at hand. Mr. Wallace advised against the

proposed alterations at Fielden House, and suggested that a more suitable location be found.

On March 17, 1939, Mr. Cole Deacon conceived the idea of using a disused tube station for the offices of the Committee, as this would provide adequately-protected accommodation for the Members of the Committee and the staff in which to work, eat, and sleep, and safely house the important telephonic system. That afternoon, after discussing the idea with Sir Ralph Wedgwood, he approached the late Mr. Frank Pick, who offered the present site, and within a couple of hours furnished plans of the area available for conversion. That evening Mr. Cole Deacon sketched the layout of the offices, etc., on these plans and sent them to Mr. Wallace. The next morning, March 18, Sir Ralph Wedgwood and Mr. Cole Deacon inspected the site by candlelight. By Monday, March 20, Mr. Wallace had prepared plans for the conversion of this station and these were submitted to the R.E.C. at its meeting that morning. The scheme was approved, and Mr. Wallace was requested to proceed with it; he immediately conferred with Mr. V. A. M. Robertson, then Chief Engineer (Civil), London Transport. After Mr. Wallace and Mr. H. J. Green, then Assistant Chief Engineer (Civil) of London Transport (a member of the Railway Technical Committee on Air Raid Precautions), had visited the site, arrangements were made to use the L.M.S.R. experience of the requirements of the work by having the Headquarters planned by its staff (acting virtually as Architects) but executed by London Transport under the direction of Mr. Robertson. The distribution of the task was then agreed as follows:—

The London Passenger Transport Board to carry out all structural work, the installation of a passenger lift, A.R.P. protection, ventilation, and sewage.

The London Midland & Scottish Railway to provide and instal all fittings, lighting and power, fire-fighting appliances, telephones, and radio.

The political events at the end of March demanded that the scheme should be pushed forward rapidly, and on April 1 instructions were given for the work to be begun. London Transport thereupon engaged Sir Robert McAlpine & Sons (London) Limited as contractor for the structural work, and on the same day the various L.M.S.R. Departments began their part.

Mr. F. Fawcett, of the L.M.S.R. Chief Engineer's Office, who was responsible for the preparation of the plans, was loaned for this job and he remained on the site until the work was finished. His ability and keenness contributed in no small measure to the rapid completion of this most successful conversion.

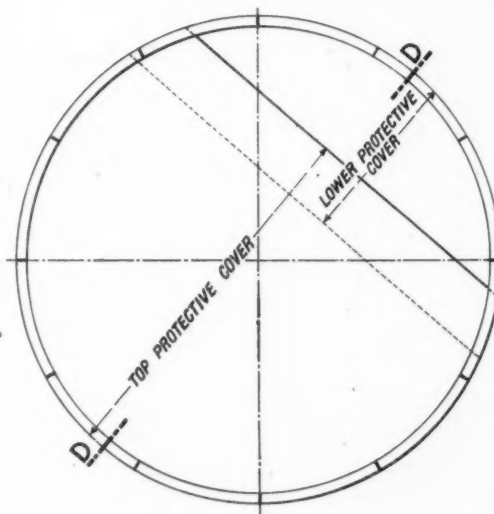
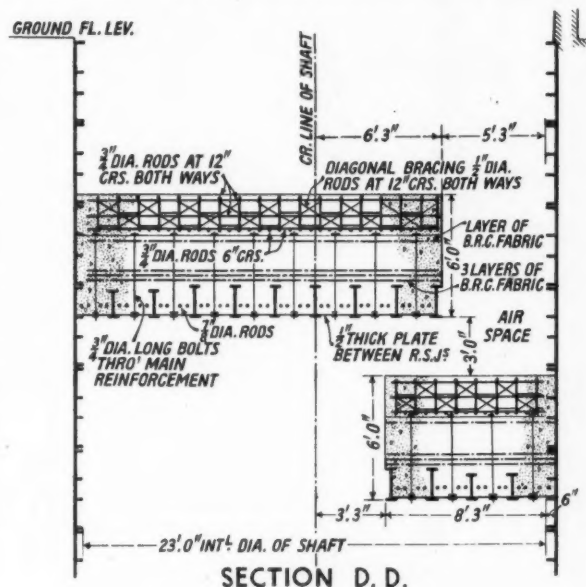
One of the main problems of the work was that of rigidly restricted widths. The outer shells of the subways are built of the usual circular iron tube segments, and the platform area is limited by the London Transport structure gauge for the tube trains passing along the adjacent running lines. The tube lines at this place are on the same level, and the largest area available was that formerly occupied by the platforms and connecting passages. The platform spaces were walled-off from the tracks, and the construction of this wall provided one of the major difficulties of the job. It was not possible to allow the contractor to erect a screen between the running tube lines and the site of the new outer wall of the premises, as the valuable inches that would have been required for this temporary screen would have resulted in a serious loss in the planned width of the offices. Consequently, this wall had to be built when tube traffic was not running, namely, between about 1.30 and 5 a.m.

Another difficulty was the limited access for materials, which necessitated the job being planned in such a way

that structural work farthest from the entrance should be completed first.

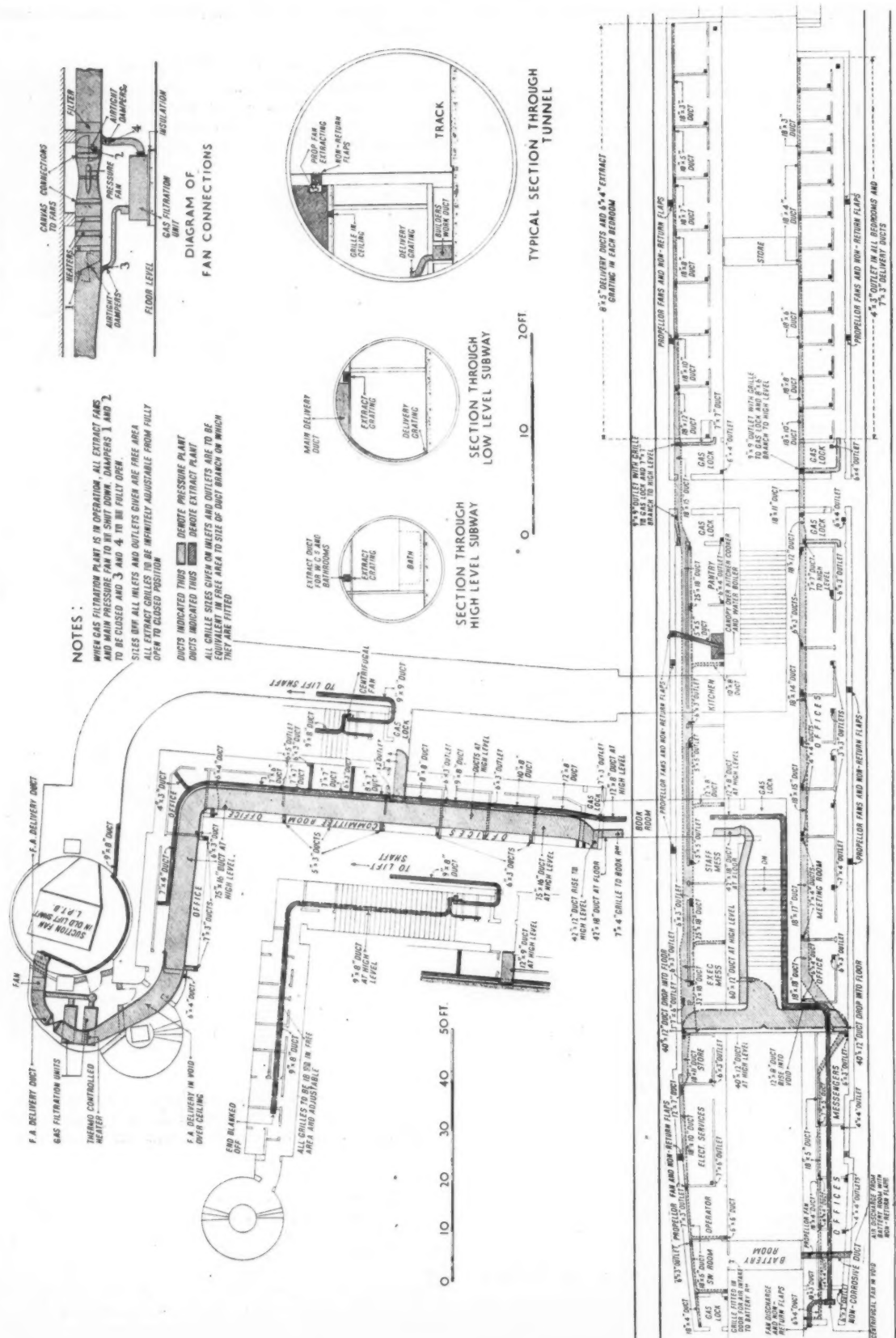
Air Raid Protection

As the main premises are in subways and tube tunnels far below the estimated depth of penetration of any bomb which might be dropped from aircraft, special protection works (other than gas locks) have not been considered

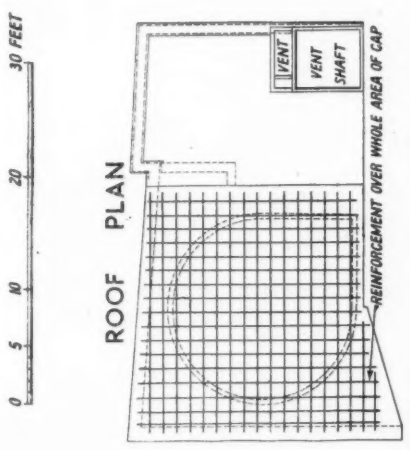
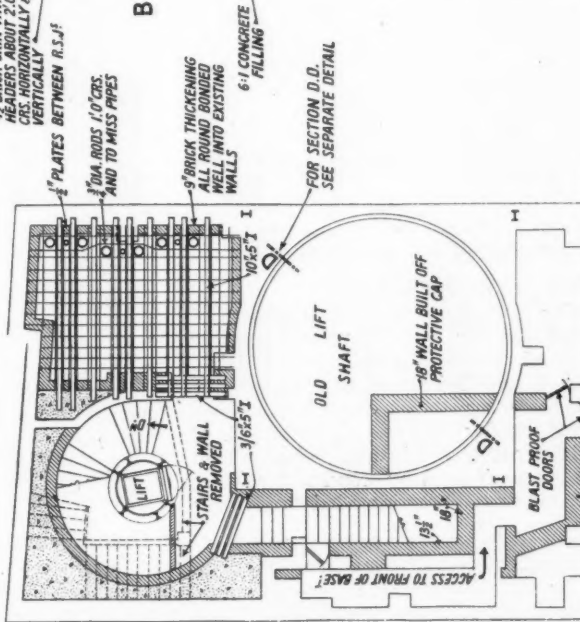
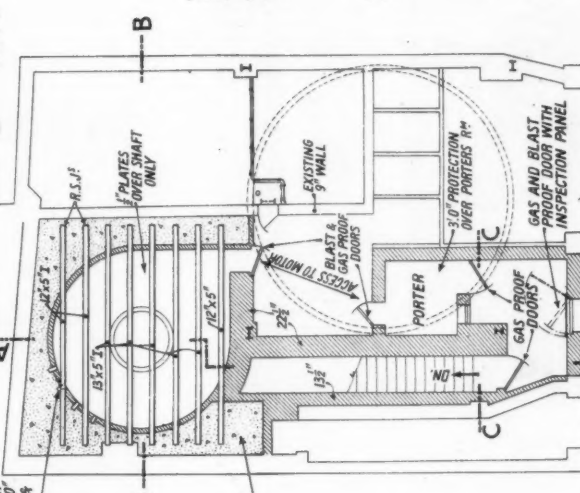
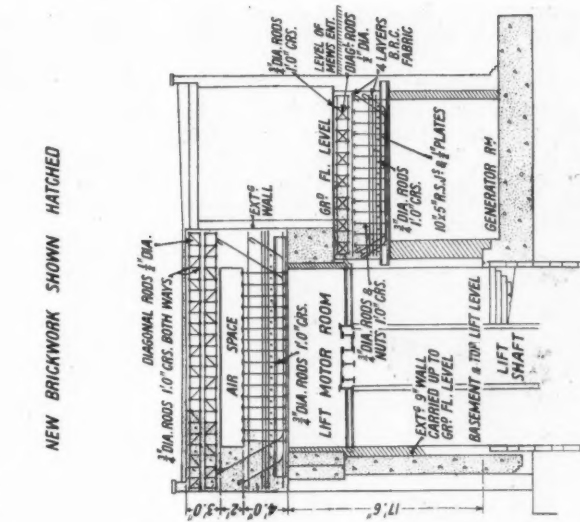
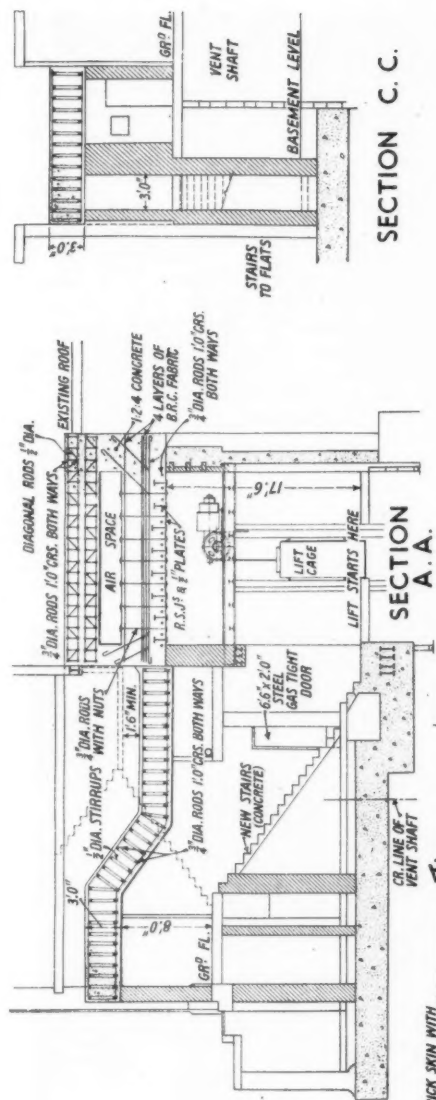


Protective covers to disused lift shaft now used for ventilation. It will be noticed that a 3-ft air space is allowed at the overlap between the upper and lower covers

necessary for the lower levels. The only parts deemed vulnerable are the ground floor (on street level), the basement immediately beneath, and, of course, the lift shafts. The drawings on page 487 show the form of these protective works, of which the principal features are the reinforced-concrete protective cap over the present stairway and lift shaft. The old lift shaft, which, since the disuse of the tube station it served, has been retained for tube ventilation, required special treatment. As may



General arrangement of the ventilation system of the R.E.C. headquarters

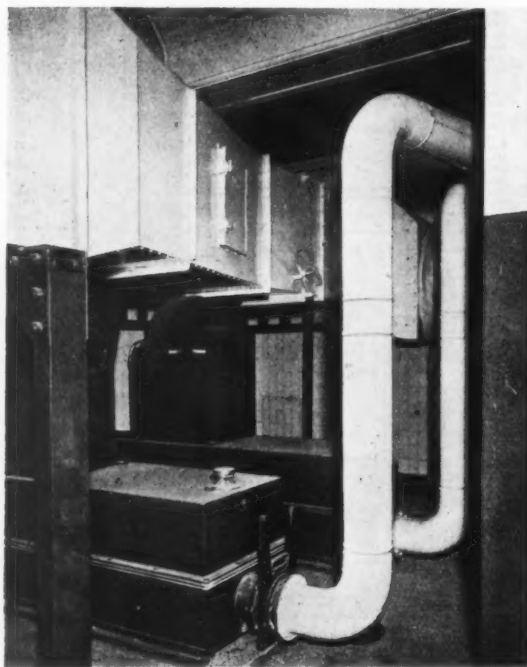


Details of the protective works over the present stairway and lift shaft, and the old lift shaft which is used for ventilation; the protective covers of the latter are shown in a separate drawing on page 485

be seen from the accompanying drawing, upper and lower protective covers have been arranged, with a 3-ft. air space between.

Ventilation

The ventilation system is sufficiently indicated by the general arrangement drawing reproduced on page 486. Fresh air is drawn in from the atmosphere some 60 ft. above street level by means of a suction fan at the foot of the old lift shaft, filtered, passed through a thermostat-controlled heater, and also (when neces-



Ventilating plant

sary) through gas filtration units, and conveyed at pressure to the offices, etc., along ducts arranged in the spaces between the ceilings and floors and the curved surfaces of the tunnels. Final delivery is at, or near, floor level. The spent air is extracted by fans through grills and gratings in the ceilings, and is discharged *via* non-return flaps to the running tunnels of the London Transport tube trains. Gas locks have been arranged at the ends of every corridor and other connection between the actual R.E.C. premises on the one hand and the present stairway and lift shaft, the tube train tunnels, and the ventilation shaft on the other hand.

Access to Headquarters

Special consideration was given to the provision of various means of entry and exit, both for normal working and in emergency, and three methods are available. Access from the street is provided *via* the emergency stairway of the former passenger station, which has been equipped with a small lift (by J. & E. Hall Limited, of Dartford). The old large passenger lifts had long since been dismantled, and the lift shaft used by London Transport for tube ventilation. At first it was intended to give the

surface entrance a street number which could be used as the R.E.C. address, but it was subsequently decided to keep secret the location of the headquarters, mainly to reduce the risk of sabotage. Accordingly, special arrangements were made with the Post Office whereby letters to the R.E.C. should be addressed simply "London, S.W.," and one of the Fielden House telephone numbers should be transferred to the emergency headquarters. Thus neither the postal address (which is not even that of the correct postal district) nor the telephone number gives the slightest indication of location.

As tube trains pass the platform level of the premises at frequent intervals, short platforms (one for each direction of travel) were arranged at which the trains might make request stops. This method of approach is available normally only to the Members of the R.E.C. and to a few chief officers, but it is capable of being adopted readily for general use if the surface entrance were to become blocked. To enable trains to be stopped for boarding at the headquarters, the short platforms are equipped with red signal lights, entirely distinct from the automatic signalling system, which are normally extinguished but can be actuated by a plunger. These lights are thus the equivalent of an emergency hand signal. Authorised persons then board the motorman's cab for conveyance to



Mr. L. P. Ball entering the motorman's cab of a tube train which has been stopped at one of the platforms of the R.E.C. headquarters by the signal lamp shown

the next station, where they transfer to an ordinary carriage. Similarly, persons wishing to alight at the headquarters have to travel in the motorman's cab from the previous station.

The third means of access is by walking along a tunnel connection to the nearest working station.

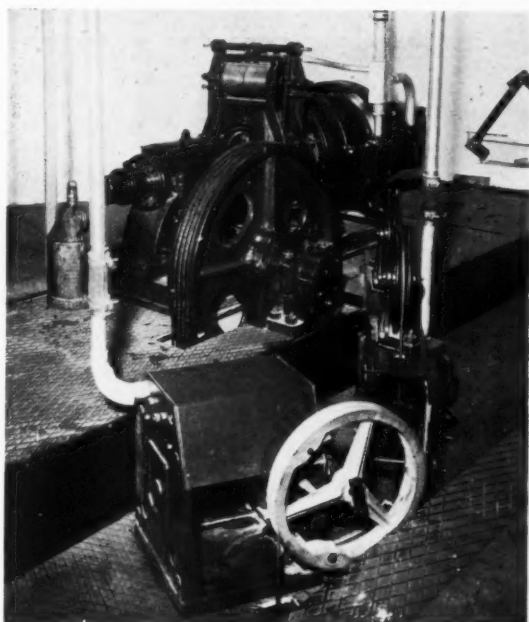
(To be continued)



Concrete cap over circular staircase and lift shaft, showing door to lift-machinery room



New cables being laid in one of the footway tubes that has been adopted as a ventilation passage



Lift machinery in chamber immediately underneath the concrete cap



Emergency stairway in use for inter-office communication between different levels

THE HEADQUARTERS OF THE RAILWAY EXECUTIVE COMMITTEE



Street level entrance to R.E.C. headquarters showing "one-way" obscure armoured glass panel in door, and steel blast-proof door folded back



Passenger emerging from lift in former emergency stairshaft showing gas lock at the entrance to the actual offices



Partitions being erected in old tube footway to form the lavatory block



Typist in passageway, which is only 2 ft. wide at floor level

THE HEADQUARTERS OF THE RAILWAY EXECUTIVE COMMITTEE

T
sys
use
err
gin
vis
Ha
sea
rep
wh
fra
trin
is s
tap
tac
sho
this
A
aga
for
from
suc
clea

Recovery of Railway Upholstery Materials

Scheme in use at Southern Railway Lancing Works



TO effect the strictest economy in railway carriage upholstery materials, a system of recovery has been brought into use at the Lancing Works of the Southern Railway in the Chief Mechanical Engineer's Department, under the supervision of the Works Manager, Mr. O. G. Hackett.

The procedure which is followed is that seats and backs from vehicles in shops for repairs are taken to a stripping bay, where the material is stripped from the frames, and is then taken to the salvage trimming stores. In this store the material is sorted into sizes, calico detached from tapestry, and buttons, thread, twine and tacks are removed. This operation is shown in the illustration at the head of this article.

After this first sorting, the material is again inspected, and that most suitable for re-use is sorted out. Dust is removed from the selected pieces by an electric suction cleaner, and the fabric is also cleansed with a solution of ammonia and



Washing material with ammonia and water solution



Making up pieces of recovered material

water. The pieces are then dried and sorted in racks until required for use.

When required, the material is taken to the cutter's bench for cutting to shape and matching of patterns before machining into seat and back covers, and also for making into rolls of material to send to outstation depots for running repairs.

Buttons recovered are cleaned and re-used, and material not suitable for retrimming purposes is made up into a variety of useful articles, some examples of which are given hereunder:—

Old velvet and tapestry ...	Aprons and gloves for blacksmiths, painters and labourers in iron yard
Old rexine ...	Vacuum piston rod sleeves, covers, correspondence bags, aprons and gloves
Twine and cord ...	Draught piping and lace piping for cushions
Calico and hessian ...	Cleaning rags, in place of sponge cloths
Old canvas ...	Protective clothing, sacks, black-out screens, and axlebox dust shields
Thread ...	Sold as salvage
Small pieces of all material	Sold as salvage

The wire spring inserts are sorted, cut into suitable sizes and re-made by piecing to sizes as required. Before the present system was brought into operation, these spring inserts were either scrapped or sold.

We are indebted to Mr. O. V. Bulleid,

Chief Mechanical Engineer of the Southern Railway, for the above details and illustrations.

GARDENS ON RAILWAY STATIONS.—With the appointment of an Adviser on Agriculture by the South African Railways & Harbours Administration, a comprehensive scheme to beautify railway stations is being developed. Railway nurseries are in existence at Capital Park (Pretoria), Kroonstad (Orange Free State), Inchanga (Natal), and in the Cape Peninsula. These have been reorganised, and considerable quantities of new stock plants have been brought into them. The Administration is working in close co-operation with horticultural organisations and with the parks and estates departments of municipalities. Schemes for the layout of stations are discussed with local authorities, to bring railway schemes into harmony with any similar town projects. The growing of deciduous fruit trees for railway employees, especially in the outside areas, also is being encouraged.

Pre-War "Flying Scotsman" near Welwyn, L.N.E.R.



Pre-war up "Flying Scotsman," L.N.E.R., hauled by "A4" class Pacific locomotive No. 4482, "Golden Eagle," between Welwyn Tunnels. The illustration is reproduced from "British Railways in Peace and War," issued on behalf of the four main-line companies and the L.P.T.B.

M
Sou
Uni
som
exp
Feb

T
But
(So
bee
den
the
for
gene
tech
tive
will
Don
It

F.
trict
app
with
Chie
purch
am

T
has
skill
the
Tra
D.
sign
tion
will
mitt
of t
Mess
Wilk
Wilk

M
conf
Boa
K
has
as I
& C
from
D

firm
Med
M
cial
Offic
poin

M
to c
Acco
M
in l
Eng

M
M.S
leav
Apri

M
offic
M
to c
tend

M
Stor
offic
Boa

M
poin
S.I.

RAILWAY NEWS SECTION

PERSONAL

Mr. Gilbert Szlumper has sailed for South Africa, where, at the request of the Union Government, he will advise on some of the railway problems there. He expects to be back in this country next February.

L.N.E.R. APPOINTMENTS

The L.N.E.R. announces that Mr. H. A. Butler, Divisional Stores Superintendent (Southern & North Eastern Areas), has been appointed Traffic Stores Superintendent, with responsibility under the Chief Stores Superintendent for the custody of all traffic and general stores (as distinct from technical stores) and other relative matters. Mr. Butler's office will continue to be located at Doncaster.

It is announced also that Mr. F. H. Colebrook, formerly District Engineer, York, has been appointed Purchasing Agent, with responsibility under the Chief Stores Superintendent for purchases, delivery and sales, among other matters.

The Minister of Home Affairs has appointed the Earl of Enniskillen, C.M.G., as Chairman of the Northern Ireland Road Transport Board, in place of Mr. D. L. Clarke, who recently resigned. The administrative functions carried out by Mr. Clarke will be undertaken by a committee of management consisting of three members of the Board: Messrs. J. S. Rodgers, D. Wilson-Smyth and James Wilson.

INDIAN RAILWAY STAFF CHANGES

Mr. W. S. Benton has been confirmed as Director, Railway Board.

Khan Bahadur Z. H. Khan has been appointed to officiate as Director, Traffic (Commercial & General), Railway Board, as from June 15.

Dr. P. C. Dutt has been confirmed permanently as Chief Medical Officer, B.A.R.

Mr. P. C. Chowdhury, Financial Adviser & Chief Accounts Officer, E.I.R., has been appointed Accountant-General, Bengal.

Mr. P. H. S. Rao has been appointed to officiate as Financial Adviser & Chief Accounts Officer, E.I.R.

Mr. W. G. W. Reid has been confirmed in his appointment as Chief Mechanical Engineer, M.S.M.R.

Mr. A. C. Turner, Controller of Stores, M.S.M.R., has been granted two years' leave, preparatory to retirement, as from April 8.

Mr. E. Perfect has been appointed to officiate as Chief Engineer, M.S.M.R.

Mr. Sidney Smith has been appointed to officiate as Chief Commercial Superintendent, S.I.R., as from June 1.

Mr. A. R. Edington, Controller of Stores, S.I.R., has been appointed to officiate as Director, Stores, Railway Board.

Mr. R. Madhavachari has been appointed to officiate as Controller of Stores, S.I.R.

Mr. H. A. Reid, C.I.E., M.I.Loco.E., Chief Mechanical Engineer, South Indian Railway, who, as recorded in our June 16 issue, was made a Companion of the Order of the Indian Empire in the King's Birthday Honours List this year, was born in 1891. He received his practical and technical education in Glasgow, the former at the St. Rollox Works of the late Caledonian Railway, and the latter at the Royal Technical College. He was appointed an Assistant Locomotive & Carriage Superintendent on the South Indian Railway in 1914. Mr. Reid saw



Mr. H. A. Reid

Chief Mechanical Engineer, South Indian Railway, who has been made a C.I.E.

service with the Royal Engineers in Mesopotamia from 1916 to 1919, after which he returned to the service of the South Indian Railway. He passed through the various grades in the Mechanical Department, and was appointed Chief Mechanical Engineer in 1932. Mr. Reid was Chairman of the Mechanical Section of the Indian Railway Conference Association in 1941.

Mr. E. H. Cockshott, M.I.E.E., A.M.Inst.C.E., who, as recorded in our October 13 issue, has retired from the position of Constructional Engineer, London Passenger Transport Board, studied electrical and mechanical engineering at Leeds University, and, for some years, lectured on engineering sciences. He later joined Greenwood & Batley Limited as Electrical Draughtsman, and subsequently took up an appointment with Leeds City Tramways Department as Chief Draughtsman. Afterwards he

became Assistant Electrical & Mechanical Engineer. In 1912 he joined the Underground group as Chief Mechanical Engineer to London United Tramways, and in the next year was appointed Assistant to the late Mr. Z. E. Knapp, then Chief Engineer to the Underground group. In 1916, Mr. Cockshott became a Lieutenant on the headquarters technical staff of the R.N.A.S.; he had become Captain, R.A.F., before his return to railway service after the armistice. In 1921 he was appointed Technical Officer. In 1924 he made an extensive tour of the U.S.A. to study and report on the latest developments in power stations and distribution systems. He was sent on a similar tour in Germany and Holland in 1930, and in the same year was appointed Constructional Engineer. During his association with the Underground Railways and the L.P.T.B., Mr. Cockshott has been employed principally on the provision of power-supply equipments for the many extensions to the railway system. Since 1921 he has been responsible for the provision of all new generating and sub-station plant.

We regret to record the death on November 3 of Mr. I. J. T. Colquhoun, Chairman of the Londonderry & Lough Swilly Railway Company since 1924.

The Minister of War Transport has appointed Mr. George West Byng as his representative on the Tees Conservancy Commission. Mr. West Byng is an Executive Director of Dorman, Long & Co. Ltd.

The British Non-Ferrous Metals Research Association has appointed Mr. G. L. Bailey as Director, to succeed Dr. H. Moore, who has retired.

Mr. O. E. Wood, an Assistant General Manager of the Midland Bank Limited, has been appointed a Joint General Manager.

Senhor Arthur Pereira de Castilho, Director of the Economic Division, Federal Inspectorate of Railways, Brazil, who, as recorded in our September 22 issue, has been appointed Chief of the National Railway Department, was educated at the Engineering School of Porto Alegre, and has served as a railwayman, in various capacities, in the Civil service, since 1911, in which year he was appointed Assistant Engineer on the Rede Viação Ferrea Bahia. In 1912 he was made Fiscal Engineer of, and in 1930 he became *Chefe do Gabinete* in, the Federal Inspectorate of Railways; he was promoted to the post of First Class Engineer, for merit, in 1931. A year later he was appointed representative of the Ministry of Transport on the General Tariff Council, and in 1934 he became Chief of the Section of Legislation & Contracts. In 1935 he was promoted to the post of Chief of District, and in 1937 returned to the post of *Chefe do Gabinete* with a higher classification. After occupying other important posts in the Federal Inspectorate of Railways he

became Director of the Economic Division in 1941. For many years Senhor de Castilho has presided over the Council of Tariffs, as representative of the Ministry of Transport, in the Railway Clearing House (known as the Contadoria Geral dos Transportes).

Mr. A. E. Marriott, A.M.Inst.T., Assistant District Goods Manager (Commercial), Broad Street, L.M.S.R., who, as recorded in our October 20 issue, has been appointed District Goods & Passenger Manager, Northampton, as from November 1, joined the former L.N.W.R. as a probationer in 1915, and received his early training in the Goods, Passenger and Operating Departments of the Manchester

traction. In 1933, when the L.P.T.B. was established, the area supervised by Mr. Good was more than doubled. One of his wartime responsibilities has been the repair of overhead equipment and cables damaged by enemy action, work often carried out while raids were in progress.

Mr. A. Cobb, M.I.Loco.E., M.Inst.T., who, as recorded in our November 10 issue, has retired from the position of Locomotive Running Superintendent, Southern Railway, was educated at Shrewsbury School. He entered Ashford Works, S.E.C.R., as a pupil in September, 1900, and passed through the various shops; he had also six months' experience as a fireman. In April, 1905, he

Mr. H. J. Sheppard, who has been associated with Johnson & Phillips Limited for more than 55 years, has expressed a wish to retire from active work, and has resigned office as Managing Director. He will remain on the board. Mr. G. Leslie Wates, the Chairman, has been appointed Managing Director.

Mr. L. P. Ball, Assistant Divisional Superintendent of Operation (Traffic), Crewe, L.M.S.R., who, as recorded in our October 20 issue, has been appointed Assistant (Freight Services), Chief Operating Manager's Office, Watford, H.Q., was educated at Colet Court, St. Paul's, and Lycée Corneille, Rouen, and joined the G.W.R. in 1909, in the Superintendent of



Mr. A. E. Marriott

Appointed District Goods & Passenger Manager, Northampton, L.M.S.R.



[Photo]

Mr. A. Cobb

Locomotive Running Superintendent, Southern Railway, 1936-44

[Lafayette]



Mr. L. P. Ball

Appointed Assistant (Freight Services), Chief Operating Manager's Office, L.M.S.R.

and Warrington Districts. He was appointed Goods Agent at Harrow in 1922, and, on the amalgamation of the railways, was transferred to the staff of the Chief General Superintendent, Derby, in 1923. Afterwards he returned to Euston, where he served in the Road Transport Development and Research Departments. He became Assistant Head of Section of the Commercial & Canvassing Department in 1931. Three years later he was appointed Assistant District Goods & Passenger Manager, Leicester, which post he vacated in 1943 to become Assistant District Goods Manager (Commercial), Broad Street, London. Mr. Marriott also has served as Railway Representative on the Ministry of War Transport Advisory Committee in Leicester and London.

Mr. R. S. Good, A.M.I.E.E., Divisional Engineer (Electrical), Trams & Trolleybuses, London Passenger Transport Board, who, as recorded in our October 13 issue, has retired, started his career with the British Thomson-Houston Co. Ltd. in 1899 as an electrician-improver, and worked in the locomotive shops, substations and power stations of the Central London Railway. In 1903 he joined the London County Council Tramways, at the time when the electrification of that system in South London was begun. In 1906 he transferred to North London, and was responsible for the installation of the sub-station plant needed for the conversion of the horse tramways to electric

was appointed a draughtsman, and, in December of the same year, Assistant Locomotive Inspector. In 1906 Mr. Cobb became Locomotive Inspector, which position he retained until his appointment, in November, 1913, as Assistant to the Outdoor Locomotive Superintendent. He was promoted to be Assistant Outdoor Locomotive Superintendent in September, 1920. In December, 1923, Mr. Cobb was appointed Assistant Locomotive Running Superintendent of the Southern group as a result of the amalgamation; and he was promoted to be Locomotive Running Superintendent as from March 1, 1936.

Commander Sir Charles Craven, Chairman & Managing Director of Vickers-Armstrongs Limited, is seriously ill in London. He will not be able to resume work for some time.

Mr. H. C. Chapman, formerly Assistant Manager, Commercial Relations Department, Dunlop Rubber Co. Ltd., has been appointed Acting Assistant Overseas Sales Manager, to assist Mr. Philip Proctor, Overseas Sales Manager, especially in respect of sales developments overseas.

We regret to record the death on November 7, at the age of 75, of Sir Frank J. C. Pollitzer, J.P., Alderman of the City of London, who was head of Beck & Pollitzer Limited until his retirement in 1931.

the Line's Office. During 1913 he obtained station experience in the London and Eastern Divisions, and in the next year joined the Army. He saw service in Gallipoli, and afterwards served with the R.F.C. and R.A.F. until 1919. Before demobilisation he was in charge of the Movements Branch of the R.A.F. at the Air Ministry. In 1919 he returned to the Superintendent of the Line's Office, on the outdoor staff. In 1920 Mr. Ball was appointed Outdoor Assistant to Outdoor Superintendent, North Staffordshire Railway, at Stoke-on-Trent, and in 1924 became District Controller there for the L.M.S.R. In 1929 he was made District Controller, Birmingham (New Street), and, in the next year, Divisional Freight Train Controller, Western Division, Crewe. In 1936 Mr. Ball was appointed Assistant Divisional Superintendent (Traffic), Western Division, Crewe. In October, 1939, he was detached to join Railway Executive Committee headquarters as Assistant to Mr. V. M. Barrington-Ward, Chairman of the Operating Committee. Mr. Ball has served on many Government department committees.

Mr. J. Lorimer, Assistant Passenger Manager, Scottish Area, L.N.E.R., who, as recorded in our October 6 issue, has been appointed Acting District Goods & Passenger Manager, Dundee, commenced his railway career in the St. Andrews Goods Department of the North British

Railway. Later he was transferred to the Passenger Department, and served at Innerleithen, and Galashiels, and in the

his railway career as a clerk at Kings Lynn in 1898. He had a varied training until July, 1924, when he was made Sta-

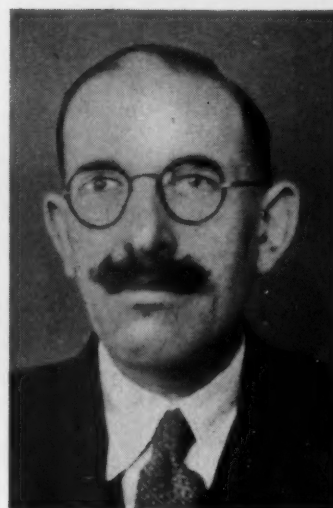
and Italy with the Gordon Highlanders during the war of 1914-18, and then returned to the G.N.S.R. After comple-



Photo **Mr. J. Lorimer** *[Lafayette]*
Appointed Acting District Goods & Passenger Manager, Dundee, L.N.E.R.



Mr. C. J. Gregory
Stationmaster, Liverpool Street L.N.E.R., 1940-44



Mr. C. B. Glenesk
Appointed Acting District Engineer, Guide Bridge, L.N.E.R.

Parcels Department at Edinburgh (Waverley). In 1911 he was appointed to the Superintendent of the Line's Office, in which he continued to serve when the L.N.E.R. came into being in 1923. He was promoted to the position of Chief of the General Section of the Passenger Manager's Office in September, 1929, and became Chief Assistant to the Passenger Manager, Southern Scottish Area, in May, 1932. Mr. Lorimer was appointed Assistant Passenger Manager, Scottish Area, in July, 1943.

Mr. C. J. Gregory, M.B.E., who, as recorded in our November 3 issue, has retired from the position of Stationmaster, Liverpool Street, L.N.E.R., commenced

tionmaster at Worksoy. He then was appointed successively Stationmaster at March (1928), Fenchurch Street (1931), and Stratford (1934). He became Stationmaster at Liverpool Street in August, 1940. Mr. Gregory was made M.B.E. in 1943 for outstanding devotion to duty.

Mr. C. B. Glenesk, A.M.Inst.C.E., Acting Assistant District Engineer, Guide Bridge, L.N.E.R., who, as recorded in our October 6 issue, has been appointed Acting District Engineer, Guide Bridge, was educated at Robert Gordon's College, Aberdeen, and joined the former Great North of Scotland Railway as an apprentice civil engineer in 1916. He served for two and a half years in France

tion of his apprenticeship, he left, in 1925, to take up an appointment in the Gold Coast as an Assistant Engineer on railway construction; later he was transferred to the Public Works Department, Nigeria. Mr. Glenesk returned to Great Britain in 1931, and in 1936 resumed railway service with the L.N.E.R. at Edinburgh as an Assistant Engineer (Construction). In 1943 he joined the staff of the Chief Engineer, H.Q.1, as Senior Assistant (Construction), and in January of this year he was appointed Acting Assistant District Engineer, Guide Bridge, from which position he took over in April the responsibility of the Manchester District of the L.N.E.R., on the retirement of Mr. E. A. Lees.

G.W.R. Silver Cup Presentation



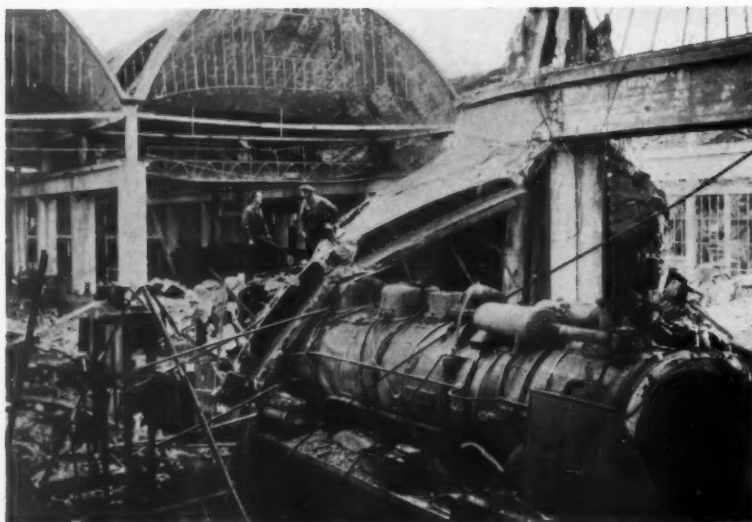
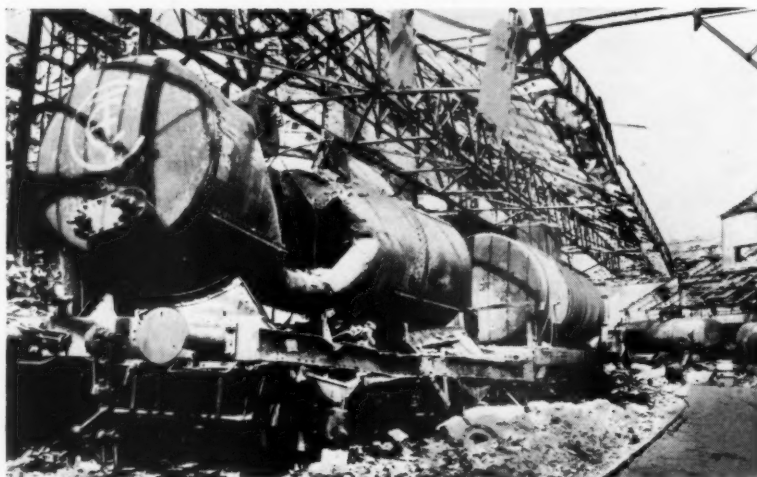
The presentation by Sir James Milne of a silver cup to the Honorary Secretary, Women Ticket Collectors' National Savings Group, Paddington (see paragraph, page 503)

Left to right are the following officers and staff of the Great Western Railway:—Messrs. R. F. Hurford (Assistant Publicity Officer), Liaison Officer for War Savings, London Area; C. T. Cox, Superintendent, London Division; K. W. C. Grand, Assistant General Manager; Sir James Milne, General Manager; Miss E. Forster, Honorary Secretary, Women Ticket Collectors' National Savings Group, Paddington; Messrs. J. R. C. Williams, Stationmaster, Paddington; R. Lewis, General Manager's Office; and Inspector Sullivan

Air Attack on Enemy Rolling Stock



The accompanying views are representative of many which have been released recently by both the British and the United States authorities, showing the damage to enemy rolling stock resulting from Allied air bombardment. The top picture shows one of many locomotives damaged in Allied air raids on the German railway repair sheds at Vaucelles (Caen). It will be noticed that this engine had been armour-plated to offset the effects of machine-gun fire from the air, but this plating was insufficient to withstand the effects of bombing. The view on the right shows damaged oil tankers after bombing by the U.S. Eighth Air Force



Left : British engineers engaged on salvage work at the former German repair sheds at Vaucelles (Caen)

TRANSPORT SERVICES AND THE WAR—268

Women on Canals

The scheme for training women's crews for canal boats is being extended, and there will be vacancies shortly for a limited number of additional trainees. A form of application, and particulars of service, can be obtained from the Inland Waterways Division of the Ministry of War Transport, Stratton Street, W.I.

Quick Turn-Round of Wagons

No fewer than 13,657 wagons were unloaded and turned round by Magnesium Elektron, Limited, at its Clifton Junction Works, Manchester, during the two years ended September 30 last, without incurring a single day's demurrage. In a letter of congratulation received by the firm, the Ministry of War Transport states: "This is a record of which any firm might well be proud, and great credit is due to all concerned for a very material contribution to the war effort."

French Railway Restoration

M. René Mayer, French Minister of Public Works, stated on November 4 that it was hoped to re-establish railway traffic across the River Loire at Orleans by the beginning of December. At present all passengers and goods must be transhipped and ferried across the river. The reopening of the railway bridge at Orleans will be an important step towards the consolidation of France.

Swiss-French Railway Service

For reasons which were stated to be beyond the control of the French railway authorities, railway traffic between Switzerland and Paris, *via* Dijon, was not resumed last week, as intended. We made reference to the proposed arrangements in our November 10 issue, page 462. The Swiss Federal Railways have announced that conversations between the Swiss and French railway authorities are being continued.

German Damage to Greek Railways

Details of the damage done to the Greek railways by the Germans were given by Mr. S. T. Stephanopoulos, Greek Minister of Communications, in a statement issued in Athens on November 3. He said that only 10 locomotives out of 200 remained. The whole of the 300 odd passenger carriages had disappeared, and only 40 damaged wagons had survived out of more than 4,000. These indications presumably related to the standard-gauge locomotives and rolling stock of the Hellenic State Railways. According to the latest information available to us, this stock, at the time of the German invasion, was 222 locomotives, 347 passenger carriages, and 4,272 wagons.

German "SG" Goods Trains

"SG" goods trains (*Schnell-Güterzüge*) are those fast trains of the German Reichsbahn which are not broken up at destination, but are worked as block trains in both directions. They are fast not only in operational speed but also because their handling avoids a considerable amount of shunting. Among the various types of "SG" trains, cement trains, coal trains, fruit trains, potato trains, and sugar beet trains (*Zementzüge, Kohlenzüge, Obstzüge, Kartoffelzüge, and Rübenzüge* respectively) have proved of special importance. The last to be introduced were the cement trains working to and fro between the cement works and the most important cement-consuming or distributing centres. The loading times for "SG" trains, the number of their wagons, departure and arrival times, etc., are regulated by special timetables. The average axle total varies between 100 and

120. Mines able to load trains of this magnitude are paid a premium of RM. 200 by the Reichsbahn for each loading. The special timetables for the potato, fruit, and beet trains during the harvest periods are arranged in collaboration with representatives of the producers' associations.

Priority for German Trams

The German radio announced on November 7 that Himmler had ordered trams to be given the right of way by all other vehicles, as they are being used increasingly for the carriage of goods and for towing other vehicles.

Delivery without Bill of Lading in Germany

One result of heavy Allied air attacks on Germany is that increasing numbers of cars occur where railway consignments arrive at their destination without any bill of lading. In the circumstances, German goods stations have been empowered to deliver such consignments to their recipients without the necessity of producing the bill of lading, provided the recipients make a declaration assuming full responsibility in respect of the freight and other expenses, and provided they declare, after careful examination, that the goods are actually intended for them.

Belgian Transport Restoration

The reorganisation of transport in Belgium is making good progress, according to a statement made by M. Ernest Rongvaux, the Belgian Minister of Communications, in a speech at Brussels. More than 1,200 locomotives are in running order, and the rate of repair is being maintained at 60 to 62 engines a week; carriages also are being repaired rapidly. Electric train services between Brussels and Antwerp are now restored. There has been a notable improvement in the transport of pit props and of coal. More than 250,000 tons of fuel have been transported recently. All efforts have been directed to the running of goods trains; passenger trains performance have been reduced to the minimum.

"War Fares" on the Berlin Railways

Following the example of the Berliner Verkehrsgesellschaft (B.V.G.), the municipal undertaking operating the Berlin trams, buses, and U-Bahn, the Reichsbahn has introduced what are termed "war fares" (*Kriegstarife*) on the Berlin S-Bahn and the lines connected with it. The new fares became effective on October 1, and are designed to reduce the use of labour and material. Individual tickets for ten trips are issued, compared with eight-trip tickets on the B.V.G. Among the advantages for the war fares are the reduction of the categories of fares from 28 to 8, the subdivision of the S-Bahn system into a circle zone (*Stadt und Ringbahn*) and five suburban zones, and the doubling of the third-class fare for the second-class. The last-named measure is intended to act as a deterrent to the increasing use of second-class accommodation.

For example, the third-class fare from Berlin-Zehlendorf (a suburb in the south-western part of the capital) to Friedrichstrasse Station (in the centre of the town), or to Köpenick, is 20 pfennig (40 pf. second-class), but is only 15 pfennig (30 pf. second-class) when ten-trip tickets (costing RM. 1.50 and 3 respectively) are used. The monthly season ticket for the same trip costs RM. 7 (Rm. 14 second class).

Ticket barriers at exits have been abolished, but tickets are inspected in the

trains by "voluntary" helpers, mostly Reichsbahn staff of all ranks working in their own time.

Compartments for German Wounded

In accordance with a recent Decree, all passenger trains in Germany include a special compartment for seriously-wounded soldiers. So far as possible, this compartment must be located in a carriage in the middle of the train. Furthermore, wounded soldiers who are holders of third-class tickets may now travel second-class without paying the difference between the two fares.

Reichsbahn Works Canteen Trains

Numbers of works canteen trains are now being operated by the German Reichsbahn to assist in feeding labour masses suddenly displaced as a result of air raids or other emergencies, and it is stated that they have proved a success. The first of these trains was put into service in August last. Each train consists of five reconstructed goods wagons, namely, a kitchen car, a stores car, a tank car, a crew car, and a dining car. Each cooking boiler has a capacity of 300 litres (66 gal.) and 300 meals can be served at a time, or from 600 to 900 meals a day. Particulars of the special kitchen carriages and catering trains now in use in Germany were published in our issue of June 23, 1944, page 649.

Danes "Steal" Train Ferry

On Monday night, November 6, five Danish patriots arrived at the Swedish port of Helsingborg with the largest Danish train ferry, the *Storebælt*, after having overpowered the crew of 27 and shaken off a German escort vessel, a mine-sweeper. It appears that the German authorities had permitted this ferry from the Korsør-Nyborg route to be taken to Copenhagen for repair, and that, while it was passing through the narrow strait opposite Elsinore, the patriots suddenly boarded the vessel and took charge, and succeeded in reaching Swedish territorial waters before the German escort vessel could take any effective action. By a curious coincidence, it appears that a Swedish naval vessel happened to be in the neighbourhood, and thus was able to prevent any possible violation of Swedish territorial waters by the German escort vessel. It is believed that the Swedes have retained the ferry, which is, thus denied to the Germans for troop transport.

The *Storebælt* is owned by the Danish State Railways. She is a twin-screw diesel-engined vessel, of 2,942 gross tons, built in 1939 by the Elsinore Shipbuilding & Engineering Company, with Burmeister & Wain engines. Her principal dimensions are: length 347 ft., breadth 56½ ft., depth 18½ ft.

Transport in Russia through Persia

Under the direction of Mr. G. F. Sinclair, Chief Engineer, Trams & Trolleybuses, London Passenger Transport Board, a noteworthy feat of transport has been conducted through Persia in connection with the conveyance of supplies to Russia. For three years Mr. Sinclair held the post of Transport Director of the United Kingdom Commercial Corporation in the Middle East, the authority responsible for the enterprise, but he has now completed the service for which he was seconded by London Transport, and has resumed his own duties in England.

Some brief details of this transport undertaking were given last week (page 462), and further particulars have now become available. As we then recorded, 20 members of London Transport staff

have been engaged (some of them for three years) in one of the largest feats of road transport in the war, namely, the carriage of war supplies to Russia over 600 miles of road on military lines of communication through Persia to the Russian zone itself. The main traffic centre in Persia was at Hamadan.

The road haulage was organised in convoys each of ten or more lorries. These were loaded at railway termini and made the round trip of 1,200 miles in 12 days. More than 5,000 lorries of all sizes, from 4 tons to 10 tons, operated day and night on two routes. The Russian and the Persian equivalents of the words *Aid to Russia* were exhibited, together with the Allied flags, on the lorries, which were

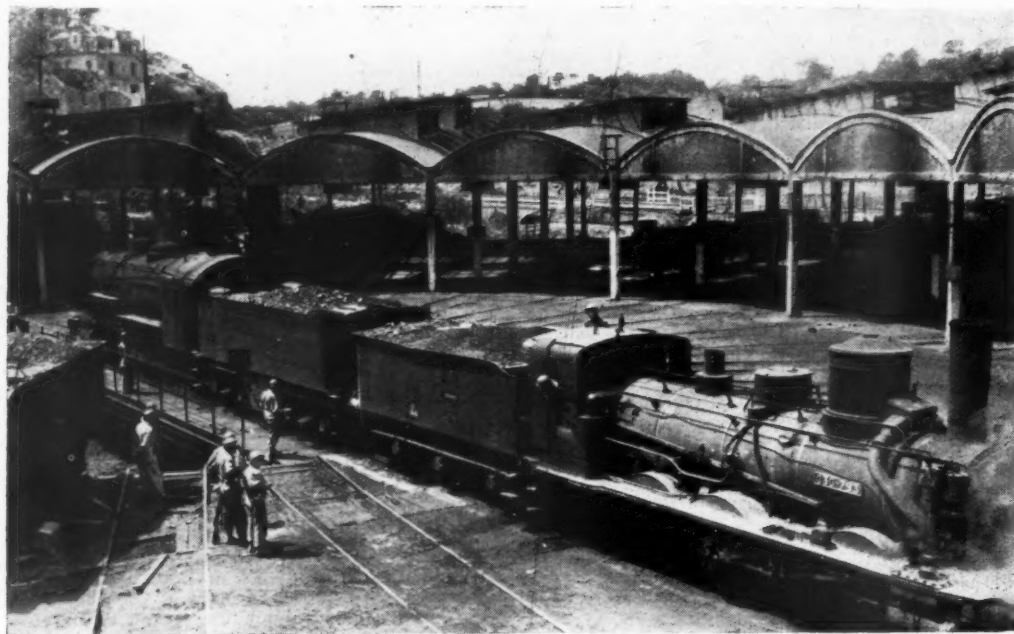
Company). Operation, maintenance, and clerical labour was chiefly Persian, Arabian, and Armenian. Thousands of men of these races had to be trained, tested, and graded by the London Transport executive staff out there. Fitters and mechanics were especially hard to find, and the use of Italian prisoners of war, who were experienced mechanics, was very welcome.

Upon his return to England, Mr. Sinclair was guest at a lunch given by the United Kingdom Commercial Corporation, and speeches were made in appreciation of his work. Lord Latham, a Member of the London Passenger Transport Board, expressed his pleasure that the staff had done such good work in

Virginian Railways seek exemption for their 105-ton 12-wheel wagons, which are subject to special braking conditions. It is considered by the American Short Line Association, which includes all the smaller lines, that its members should be exempt, by reason of their light traffic and short trains.

A Demurrage-Free American Record

A record has been achieved recently by the East Pittsburgh works of the Westinghouse Electric & Manufacturing Company. Over a period of twelve months, nearly 16,000 bogie wagons have been loaded or unloaded at the works with an average detention of 1.37 days to each wagon, and without a single claim for demurrage. All



The first U.S.A. roundhouse on the European Continent: it is in Cherbourg, and is operated by one of the Shop Battalions of the Army Transportation Corps

loaded with metals, ammunition, wool, rubber, foodstuffs, medical supplies, and other essentials. There were long hauls up steep and narrow roads, some of them mountain roads at 12,000 ft. and snow-bound. Recovery vehicles patrolled the roads, giving first-aid for all mechanical faults. Sometimes, however, there was no cure at all, as when lorries fell over precipices 1,000 ft. deep.

Coupled with this achievement was another—the erection and running of a lorry-assembly plant. Here new Lease-Lend lorries for Russia were assembled at the rate of 50 a week and, as they left the hands of the "London Transport" engineers, were boarded by Russian soldiers, who drove them to their own country. All these services, consisting of the operation of the lorries, the maintenance of the lorries, and the assembly of new lorries, were directed by Mr. Sinclair.

With Mr. Sinclair, and selected to form the nucleus of his executive staff, were members of the traffic and engineering branches of London Transport. Their colleagues were men who had worked in equivalent capacities in Cape Town and Johannesburg (on the staff of transport undertakings in those cities) or in Asia

Asia; and Sir Francis Joseph, Chairman of the U.K.C.C., mentioned cause for further indebtedness to Mr. Sinclair, in that he went to Ethiopia and there organised road transport of goods with such success that the Emperor expressed his gratitude in person.

Compulsory U.S.A. Brake Changes

Some time ago the Interstate Commerce Commission laid it down that the whole of the wagon stock in the United States must be fitted with the improved "AB" type of continuous air-brake, and, further, that the work must be completed by January 1, 1946. Since then, however, war conditions have caused acute difficulties in obtaining the necessary equipment and modifying the type of brake previously in use, and many of the railways are asking for an extension of time. The New York, New Haven & Hartford agrees to the specified date, provided that wagons which it had proposed to withdraw in 1946 and 1947 are exempt. Other lines seek a postponement until five years or some "reasonable period" after the termination of hostilities. Various railways contend that the Order should apply only to wagons used in inter-railway working, and not to those used by railways exclusively on their own lines, such as service vehicles. The

these wagons, of course, were of the usual American high-capacity bogie type, and it is calculated that 9,800 wagon-days have been saved by this smart handling, compared with normal methods. The firm's achievement has been commended specially by the Office of Defense Transportation as a valuable contribution to the American war effort.

Indian Wagon Ferries

A great deal of additional work has been thrown on the Marine and Transportation Departments of some of the Indian railways by the war. The Bengal & Assam Railway, in particular, has been hard pressed, and, over its busiest wagon ferry, it has succeeded since the outbreak of war in increasing the number of wagons carried by no less than 400 per cent.

The U.S.A. and the Bengal & Assam Railway

Replying to questions in the Indian Central Legislative Assembly recently, Sir Edward Benthall, War Transport Member, said that no part of the Bengal & Assam Railway had been transferred to the U.S.A. Government. Traffic on part of the line was under the control and operation of an American transport unit, which rendered its services free.

Old Rails for New Railways

Thousand miles of track saved from Japanese

By Jean Lyon

In Free China there are more than 1,000 miles of railway built from rails which the Japanese once captured. Within the last few months more rails have been snatched away from Japan's grasp, and one day will reappear in some strategic spot where they will do Free China the most good. The last rails to be pulled up and hidden from the invading army came from the tracks north of Kweilin. These rails will go back into their old positions if the Chinese recapture the roadbed, but, if that section of the line is lost, the Chinese will have more rails to use in the west. When the Japanese capture a railway from the Chinese the rolling stock and the rails have usually disappeared.

The railway which winds its way west and south from Kweilin has been built slowly and laboriously with hand picks and chisels since the war began. From the railhead at Tushan, some 700 miles from Kweilin, more track is being laid by hand. There are enough rails stowed away now to extend the track to the city of Kweiyang, capital of Kweichow Province, about 100 miles farther west. After that stretch is built, the engineers hope that rails will be coming in over the Burma Road, or, better still, through an Eastern sea port.

Every rail needs at least eight men to haul it. That means that eight men tugged it from its mooring back in Chelkiang Province, or in the area of Shanghai or Peiping or Hankow. Those eight men were probably farmers. They had been told by the engineers who had travelled through their village just how to take the rail from the track, how to hide it away, and to whom to give it when the time came. They hauled the rail to a rice paddy field and hid it in the mud, or to a nearby river-bed where they buried it and marked the spot. Later, when the engineer returned to their village, after the Japanese had entered the territory, these eight farmers once more put the rail on their shoulders and wound their way through paths where they and their guides knew there were no armed Japanese. The rail finally reached a river or a Chinese-held railhead, and was carried west. There it was unloaded by eight more men—labourers, building the new westward-bound track—and carried to the newly-laid section of the roadbed.

Bridge girders were brought out in much the same way from occupied territory. Forty bridges have been moved almost bodily from the occupied railway lines into Free China. These vary in length from 8 metres to 32 metres. Some eighty such spans were dismantled by the Chinese, but the materials for about five of them were too badly damaged in the dismantling process to be useable in the new railway.

The entire removal of rails and bridge material from the occupied track was carefully planned and executed on behalf of the Ministry of Communications, which saw far in advance the difficulties it would have to face in getting new rails for new tracks if the Eastern coast of China were occupied by Japan. Engineers, therefore, were trained in a specialised railway "scorched earth" policy. They were sent out into the

village districts along the railways of the Eastern seaboard, where they instructed the farmers as to what was to be done in case the enemy came close. The farmers were rewarded for their labour, and were also told of the strategic importance of their work. In some cases the tracks were torn up before the enemy came in, and in others they were torn up after the enemy had arrived. There are even areas in Chekiang and Kiangsi Provinces where tracks are still being snatched away from the Japanese and smuggled out into Free China. The 700-mile railway from Kweilin (Kwangsi) to Tushan (Kweichow Pro-

vince), was built from rails lifted from the old Chekiang-Kiangsi Railway and from the northern end of the Canton-Hankow Railway. There are still rails enough left from this section to carry the line 100 miles more to Kweiyang.

The old rolling stock has also moved with the rails. The carriages which once made up the famous Tientsin-Pukow Blue Express are now running out of Kweilin. The Green Express, which in pre-war days was famous on the Lunghai Railway, has carried privates and generals, correspondents, and refugees over the Hunan-Kwangsi line. At present, 34 different types of locomotives, taken from every pre-war railway in China, are hauling trains loaded with supplies for the North Kwangsi fighters. They are hauling them over 29 different types of rail. This results in slow and bumpy running, but it enables supplies to get through.

Paris Metro Traffic During the War

(From Our Paris Correspondent)

Traffic on the Paris Metro during the war has increased tremendously, and record figures were reached in 1943. The daily average rose to 3,640,000 passengers and frequently more than 4,000,000 a day were carried. When the German occupation began, taxicabs and motor-buses disappeared, and, as no other means of surface transport was available, Parisians were driven underground willy-nilly. Some gas-driven buses were put on to serve suburban needs, but most of them were soon taken off again, apparently to serve German military transport requirements. Bicycles grew in favour and a few antiquated horse-drawn *fiacres* were resuscitated. The Metro, however, was the great stand-by of the public until fewer trains were run because electric

1944, the supply gradually dropped to 400,000 kw. in July. The reopening of the Metro, although with a very limited service of trains, came as a great relief to Parisians. As the power supply increased, more trains were run and some stations are being reopened. Crowds, however, still have to struggle to find standing room in the carriages. When the traffic was at its height last year, the crowds were moved with greater celerity as the trains were run at 1½-min. intervals, and steps were taken to prevent too great numbers gaining access to the platforms. The closing of numerous stations helped in speeding up the trains.

Figures for the Metro urban lines, excluding the few short suburban extensions, show traffic increases as follow:—

	1938	1941	1942	1943	1944 (six months)
Passengers (in millions)	760	1,035	1,239	1,330	653
Daily average (in millions)	2.08	2.83	3.39	3.64	3.59

power was rationed and finally cut off altogether.

Wonderful results were achieved by the technical staff of the Metro, despite stringent economy in the electric power supply. Power consumption per passenger was 201 watt-hours in 1943, against 433 in 1938, a saving of more than 53 per cent. Eventually, the shortage of power led to the closing of 255 stations on July 24, 1944, nearly 75 per cent. of the total; the reduction of lighting in the trains, on the station platforms, and in the underground passages; and the discontinuance of lifts and escalators. As the Metro lines run mostly under the streets close to the surface, there are not many lifts. For the same reason only a few deeper stations could be used as shelters during air raid Alerts. When the sirens sounded, all traffic was suspended and was not resumed again until half an hour after the Raiders Passed signal was given. With the increasing dearth of coal it became impossible to make good the deficiency in the high-tension supply of power from Central France. This led to the closing of certain lines, and on August 13, 1944, of the entire system. The Metro was not reopened until September 11, and meanwhile Parisians had to walk.

In the winters of 1941, 1942, and 1943, the Metro electric power supply was cut to 900,000 kw. daily, against 1,100,000 kw. in December, 1938. From January,

While on certain working days the number of passengers was over four million, on Sundays it never exceeded 2,800,000. To cope with the traffic, the management permitted a nominal 40 per cent. overcrowding. In reality, counts made in the winters of 1942 and 1943 showed that some carriages carried 160 per cent. of normal capacity. To provide more standing room, it was decided to abolish seats, but, because of the lack of materials for making the requisite alterations, this plan was abandoned. However, a beginning had been made on the most overcrowded line—Porte d'Orléans to Porte Clignancourt—and here it was shown that the capacity of 557 had been increased by 7 per cent. Metro travel is popular in large part because a flat fare of 1½ francs (1.8d. at 200 fr. to the £) carries a passenger to any station on the Paris or suburban lines, except on the Luxembourg—Sceaux long-distance section.

WOMEN REPLACE MEN

On August 31, 1939, the Metro personnel numbered about 14,300. By January 1, 1944, the war losses were: 2,150 prisoners; 110 killed from September, 1939, to June, 1940; and 1,350 transported to Germany. Nearly 2,000 women were engaged as temporary workers, to fill the gaps. As a further measure, the rear conductor in trains of five coaches was dis-

pensed with; this post had already been suppressed from 1934 to 1939 on trains of three and four coaches as a result of improvements in automatic signalling and closing carriage doors. Metro trains are now operated by two men, the driver and one conductor. The dearth of men workers was also felt in the repair shops and on permanent way work. Scarcity of raw materials increased the difficulties. Frequent Alerts caused much delay and inconvenience. Before members of the public were readmitted to the trains, the lines were all inspected and the shelters disinfected. Traffic conditions are now rapidly improving, and by the middle of November the Metro will probably resume its normal working hours of 5.45 a.m. to 11.30 p.m.

Despite all difficulties due to the war, the Metro Company continued with its

suburban extensions. Extension work on Lines 7 and 13 towards Saint-Ouen and Ivry was stopped by the German occupation, but the extension of Line 5 from the Gare du Nord to the Eglise de Pantin, and of Line 8 from the Porte de Charenton to Charenton, were completed and opened early in October, 1942. This brought the total length of the Metro double tracks from 159 km. (99 miles) up to 164½ km. (102 miles), including 16 km. (10 miles) extra mures.

PLANS FOR THE FUTURE

While continuing further extensions, the company plans to provide longer trains and to lengthen platforms, to increase speeds, and to build more roomy carriages. Trains on busy lines or for rush hours will be composed of three units, each unit consisting of three articu-

lated coaches resting on four bogies and fitted with eight 100-h.p. motors, one to each axle. On less busy lines, trains may be made up of one or two units of three articulated coaches each. Coupling will be automatic. Each set of three coaches will be 35 metres (115 ft.) long, and the whole train of three sets about 105 metres (345 ft.) long. Accelerating power will be such that a speed of 40 km.p.h. (25 m.p.h.) may be attained in 10 seconds.

The length of many of the old platforms is only 75 metres (246 ft.). To accommodate the new trains, all platforms must be 105 metres (345 ft.) long. Line No. 1, from the Chateau de Vincennes to the Pont de Neuilly, which already has a number of the longer platforms, will be the first to have all its platforms brought up to the required length.

First Class Carriages

The following correspondence has appeared recently in *The Times*:—

Sir,—The railways appear to possess a strange ethical code. Having sold their full quota of first class seats they permit holders of third class tickets who have brazenly ensconced themselves in seats in first class carriages to pay excess and retain their seats. The ticket inspectors accept the money with urbanity, railways add the extra money to their coffers, while legitimate first class travellers—season-ticket holders and others—stand in the corridor impotently.

What is the usual commercial term for the trader who oversells? Is it otherwise than fraudulent trading? That is what railways do with calm effrontery.

Surely ordinary commercial honesty demands that all first class ticket holders should be seated before those who had intended travelling third class are permitted to percolate. To accept the money, as railways do now, is under false pretences, as well as encouraging that form of inconsiderateness which is commencing to characterise a section of the people.

Incidentally, I happen to be one of those people—there are many—who travel "first" not for comfort but to work, while travelling, in an endeavour to compress 20 hours of work into a 24-hour day.

Yours faithfully,

H. NEWMAN

87, Hagley Road, Edgbaston,
Birmingham.

Sir,—Mr. Newman's allegations in *The Times* of today against the railways of fraudulent trading and of accepting money under false pretences show a complete lack of knowledge of the facts.

He must surely be aware of the present conditions under which there is a great reduction in the number of trains now run compared with those run before the war, and a great increase in passengers travelling. The number of passengers in the average train is 150 per cent. greater than before the war and, with the inevitable overcrowding which has resulted, it became necessary in cases where all available third class accommodation is occupied to permit third class passengers to travel in first class compartments. Necessarily there is an inadequate staff to meet wartime conditions, and most passengers travelling appreciate this fact.

The issue of a ticket is not a contract to provide accommodation on any particular train, and it must be obvious to anyone that the limitation of the sale of

tickets, especially during the present emergency, for particular trains is not practicable. The suggestion of fraud against the railways, with its other possible serious implications, is, I venture to say, most unfortunate, as the railways under Government control are doing their utmost to meet the convenience of passengers and, moreover, Mr. Newman appears entirely to have overlooked the fact that railway receipts do not, as he implies, flow into the companies' coffers, but are for the account of the Government.

Yours faithfully,

J. MILNE

Chairman, General Managers' Conference,
General Manager's Office,
Paddington Station, W.2.

Sir,—I agree with what Mr. H. Newman says regarding the behaviour of the railway companies, but I think he has overlooked one rather important point, and that is that owing to present conditions many people, including myself, who intend travelling first class if they possibly can, have come to realise that to buy a first class ticket at the booking office is frequently a waste of money. We therefore buy third class tickets, and if we are then lucky enough to secure accommodation in a first class carriage, we gladly pay the excess fare. Mr. Newman may think this is unfair to the holders of first class season tickets, and maybe it is, but it is up to the railway companies to mend their ways so as to render it unnecessary for those of us who cannot afford to throw money away to resort to such questionable expedients.

Yours faithfully,

NORMAN BOWER

House of Commons.

Sir,—Mr. Newman's suggestion of fraud on the part of the railway companies is unworthy. They do their best to discriminate between the classes in the light of the particular circumstances. The revenue from ineffective first class tickets is negligible.

If your correspondent knows of a case where a ticket inspector accepted excess fares at the commencement of a journey knowing that first class ticket holders were already standing the facts should have been reported. To prevent third class ticket holders from occupying first class seats, for a time at any rate, is impossible. However, they rarely do so, simply because of excess fare claims, if a third seat is available. Frustrated third class passengers have a similar right to a seat, within limits, as a wealthier pas-

senger, hence the tendency to overflow and a need for the urbane collector.

We can use constructive criticism, but the kind employed by your correspondent is deplorable. Railwaymen are, of course, mildly interested in work, but 20 hours a day is rather a lot—perhaps too much.

I am, Sir, yours faithfully,

SAM ENTWISTLE (Railwayman)

3, Gills Hollow, Radlett, Herts.

Sir,—I am fully in sympathy with Mr. Newman's letter in *The Times* of November 8. I would, however, point out that there are many people who prefer to travel first class but who now take third class tickets, and on the rare occasions when they can obtain a first class seat pay the excess fare. This procedure could, however, be avoided if the ticket inspectors were authorised to refund the difference to first class ticket holders who fail to obtain a first class seat.

The problem of limiting the number of first class tickets to be sold for any particular train is one that, in my opinion, the railway authorities cannot be expected to solve at present. Their defence would probably be that, while they sell you a ticket, they cannot guarantee you a seat.

Yours, etc.,

A. R. BOSANQUET

18, Burton Court, Chelsea, S.W.3

Sir,—It seems a little unreasonable that persons who, having bought third class tickets, cannot find a seat in a third class carriage should not be allowed to travel first class if they pay the difference. It is surely in present circumstances exaggerated language to talk of "overselling" and "fraudulent trading." If the railways only sold tickets for the exact number of seats available great inconvenience would be caused to the travelling public.

There does, however, seem to be a case for reserving special compartments for season-ticket holders, even third class ones, for it is a weary business having to stand in the corridor every day to and from work, or having to fight for seats with trippers and holiday-makers.

Yours faithfully,

THOMAS M. SHELFORD

Horncastle, Sharpthorne, Sussex.

(See editorial article, page 475)

BENGUELA RAILWAY RESULTS.—GROSS operating receipts of the Benguela Railway for 1943 amounted to £476,941, as compared with £409,205 in 1942. The excess of income over expenditure set aside towards redemption of debentures was £101,403, as compared with £59,965 in the previous year.

Parliamentary Notes

L.M.S.R. Bills

The House of Lords on November 7 considered a message from the House of Commons stating that it had given leave for the suspension of any further proceedings on the London Midland & Scottish Railway Bill and the London Midland & Scottish Railway (Canals) Bill in the House of Commons until the next Session of Parliament.

Lord Stanmore (Chairman of Committees) moved a motion corresponding to that agreed to by the House of Commons the previous week. He said there was some delay in connection with the opposition to the Bills which had nothing to do with the powers contained in either Bill. Considerable expense had been incurred in both Houses during the Committee stage and it would, he thought, be an injustice if they did not allow the Bills to be carried over to the next Session.

The Motion was agreed to.

Questions in Parliament

Train Reservations

Lt.-Colonel Sir Ian Fraser (Lonsdale—C.) on November 3 asked the Parliamentary Secretary, Ministry of War Transport, if he would arrange for the reservation of a compartment for disabled ex-service men and women on main-line trains until five minutes before the train left the station.

Mr. P. J. Noel-Baker (Parliamentary Secretary, Ministry of War Transport) stated in a written answer: I very much regret that Sir Ian Fraser's proposal is impracticable. Arrangements, however, are already in force whereby, on previous production of a medical certificate, seats may be reserved on trains for invalids who are unable to travel in the ordinary accommodation. The railway companies give every consideration to applications by invalid ex-servicemen and women who are eligible for reservation under these arrangements.

Passenger Accommodation in Trains

Mr. Ellis Smith (Stoke—Lab.) on November 8 asked the Parliamentary Secretary, Ministry of War Transport, if he would arrange for railway servants to give priority in service to women with children under five years of age, invalids, injured service men and women; and that seats should be reserved for them on long-distance trains.

Mr. Noel-Baker: I have every sympathy with Mr. Smith's desire to reduce the hardships of railway travel for women with young children, invalids, and injured service men and women. As I hope Mr. Smith will agree, the railway staff already does whatever it can to help these passengers who appear to need help most, and I doubt, therefore, if any formal instruction is required. The railway companies have authority to reserve seats for invalids and disabled ex-servicemen and women who produce a medical certificate.

Mr. Smith: As we have been fighting to preserve democracy, should not a few instalments of democracy of the kind suggested in the question be adopted in this case; as porters look for substantial tips, will the Parliamentary Secretary reconsider his decision, so that an instruction of this kind may be given?

Mr. Noel-Baker: With all respect to Mr. Smith I must say that I think that the railway staff is very good in this

matter, and if there are exceptions I do not think that they would be put right by formal instructions.

Mr. Smith: If the Parliamentary Secretary would make observation at any railway station, I think he will find that he has been informed wrongly as to this matter.

Mr. Noel-Baker: I have often done so.

Train Seating Capacity

Mr. Ellis Smith (Stoke—Lab.) on November 8 also asked the Parliamentary Secretary, Ministry of War Transport, if he could state the number of seats that were available on the average on the Manchester-Euston 9.52 a.m. and 2.15 p.m. trains when they arrived at Stoke-on-Trent; and could he arrange for additional coaches to be put on at this station when required.

Mr. Noel-Baker: During the last week in October, the average numbers of seats available on the 9.52 from Manchester when it arrived at Stoke-on-Trent were as follow: First class 31; third class 80. On its departure, the average numbers were 11 and 17. I regret that I cannot give Mr. Smith any comparable figures for the 2.15 from Manchester. On certain days when the traffic is particularly heavy, however, a relief train is run, which leaves Manchester at 2 p.m. I regret that additional coaches cannot be added to either train at Stoke, for the reason that both trains are already up to the maximum weight which the locomotives can pull.

Road Coach Services

Mr. J. Parker (Romford—Lab.) on November 8 asked the Parliamentary Secretary, Ministry of War Transport, if Green Line local coach services would be restored in the near future; and if he could give a date for their resumption.

Mr. Noel-Baker in a written answer stated: I regret that, because of the limitation of resources due to war conditions, I cannot now say when the Green Line coach services are likely to be restored.

Steel Control

Mr. Ellis Smith (Stoke—Lab.) on November 8 asked the Minister of Supply, if he could make a full statement on the administration of the Steel Control, giving the names and concerns with which the administrators were or are connected; what was the average cost of steel compared to 1939 prices; how did the average price of steel compare with world prices and U.S.A. prices in particular; and if it was intended to continue the present form of control after the termination of hostilities.

Sir Andrew Duncan (Minister of Supply) in a written answer stated: The Iron & Steel Control, like the other raw material controls, is an executive department of the Ministry of Supply, staffed in the main by technical experts. Policy is determined by the Ministry acting through its Raw Materials Department to which the control acts as an expert adviser. Import programmes, production programmes, expansion schemes and prices must be approved by the Raw Materials Department and, where necessary, the Ministry of Production. The control is responsible for the day to day working out of policy.

The following list gives the names of the Controller and his principal officers and of the concerns with which they were associated before joining the control. They are, in common with other members of the control, temporary Civil Servants and are subject to the conditions of service and

considerations laid down by the Treasury for this class of case:—

Controller—

Sir John M. Duncanson, the Steel Co. of Scotland Ltd.
Raw Materials Section—
Deputy Controller, Mr. C. R. Wheeler, Guest Keen Baldwins, Iron & Steel Co. Ltd.

Directors:—

Foreign ores, Mr. D. H. Kyle, Fergusson Wild & Co. Ltd.
Pig iron electrodes, Mr. N. Goodchild, Stanton Iron-works Co. Ltd.

Supplies Section—

Deputy Controller, Mr. A. G. E. Briggs, English Steel Corporation Limited.
Assistant Controller, Mr. K. G. Lampson, Dorman, Long & Co. Ltd.

Directors:—

Heavy steel and shell steel, Mr. W. F. Prentice, Dorman, Long & Co. Ltd.
Tinplates and electrical stampings, Mr. C. C. Gilbertson, Richard Thomas & Co. Ltd.
Tubes, pipes and fittings, Mr. J. N. B. Alexander, Stewarts and Lloyds Limited.
Alloy and special steels, Mr. J. S. Ridges, Brown, Bayley's Steel Works Limited.

The changes in prices of individual products vary considerably, but on the average the cost of British steel to the consumer has increased since 1939 by about 50 per cent. This increased cost reflects to a considerable extent wartime abnormalities in the cost of freight and materials, and is about 25 per cent. above the average of published U.S.A. prices at the current rate of exchange. There is no general world price for steel at present. The precise form and extent of control must depend on future circumstances, which cannot at present be wholly foreseen.

Trade Catalogues (Paper Allocation)

Sir George Schuster (Walsall—L.) on November 7 asked the President of the Board of Trade whether he was aware that important British industrial companies which had been accustomed to do large export business were unable to obtain allocations of paper for printing new export catalogues, even for limited distribution to their agents, distributors and large customers abroad; and whether he proposed to take any steps to get this handicap removed.

Mr. Dalton (President of the Board of Trade): There is a small allocation of paper for trade catalogues and I am in touch with the Ministers of Supply and Production as to the possibility of making special provision for catalogues for distribution abroad.

Sir G. Schuster: Will Mr. Dalton inquire into the way these applications are handled by his Department? Will he take note that there is a general impression among manufacturers that their inquiries are not dealt with helpfully, and that where smaller supplies are available they are not given a chance of modifying their request?

Mr. Dalton: I will gladly look into any particulars. Perhaps Sir George Schuster will help me by giving me particulars. The present arrangement is that there are 60 tons for every four-monthly period for all trade catalogues. That covers export as well as home catalogues.

Major Petherick (Penryn & Falmouth—C.): Is there any reason why the British export trade should suffer in order that Victor Gollancz may flourish?

INSTITUTION OF LOCOMOTIVE ENGINEERS.—The Institution of Locomotive Engineers will hold a luncheon at the Connaught Rooms, Great Queen Street, London, W.C.2, on Friday, December 8, at 1 p.m. A reception by the President, Mr. W. G. Grafton-Baker, will commence at 12.15 p.m. Applications for tickets (11s. 6d. each), with remittance, must be received by the Secretary at 10, Park Hill Court, East Croydon, not later than November 30.

Notes and News

L.M.S.R. New Canteen.—A new canteen for employees of the L.M.S.R. has been opened at Mirfield.

Mersey Docks Order.—The Minister of War Transport on October 30, 1944, made the Mersey Docks (Suspension of Triennial Revision of Warehouse Rents & Charges) Order, 1944.

Air-Conditioned Coaches for S.I.R.—It is understood that, at the suggestion of the South Indian Railway Advisory Committee, air-conditioned coaches are to be placed in service experimentally on the metre-gauge section of that system.

Argentine Motor Imports Substantially Reduced.—Recent Argentine statistics show a very substantial reduction in the country's imports of motor vehicles, from 50,011 in 1938 to 6,737 in 1942. Only 478 vehicles were imported in the eleven months ended November 30, 1943.

N.W.R. Pacific Locomotive with Mechanical Stoker.—One of the "XC" class Pacific locomotives attached to Lahore Shed, North Western Railway, India, has been fitted with a mechanical stoker as an experimental measure. Reports so far are stated to be favourable.

Accident to Cairo-Haifa Train.—It is reported that seven persons were killed, and 40 injured, when seven coaches of a Cairo-Haifa train left the rails near Chan-yunis, north of the Sinai border, on November 8. The accident is stated to have been due to the rails having been washed away.

Hurst, Nelson & Co. Ltd.—According to the report for the year ended July 15, 1944, the profit, after providing for depreciation and deferred repairs, income tax, and E.P.T., amounted to £32,614, against £32,344 for the previous year. Adding £12,936 brought forward makes £45,550 available for distribution. The ordinary dividend is maintained at 12½ per cent. (2s. 6d. a share), and the amount to be carried forward is £14,550.

Permanent Way Institution.—A meeting of the P.W.I. Manchester & Liverpool Section will be held in the Railway Mission Hall, Corporation Street, Preston, on November 25, at 3.15 p.m. (attention is called to the change of date from that previously arranged). Two lectures will be given:—(1) "Derailments," by Mr. S. H. Wilde, of Bolton; and (2) "Rail Lubrication," by Mr. A. Lloyd Owen, A.M.Inst.C.E., of Liverpool.

East Indian Railway Annuities.—It is notified that on September 30, 1944, there were invested:—(1) a total sum of £8,998,910, in accordance with the provisions of the East Indian Railway Company Purchase Act of 1879, for the purpose of providing a sinking fund in respect of East Indian Railway Annuities Class "B"; (2) a total sum of £2,031,195, in accordance with the provisions of the East Indian Railway Company Sinking Fund Act of 1892, for providing a sinking fund in respect of Class "C" annuities; (3) a total sum of £3,860,055, under the Act of 1892, for providing a sinking fund in respect of Class "D" annuities.

Applications for Restoration of Patents.—Application has been made by the General Electric Co. Ltd. and another for the restoration of two patents which ceased because of non-payment of the prescribed fees. The subject matter of the patents was electrically heated hotplates. One patent (No. 451,052) was dated March 4, 1935, and the date of its cesser was March 4, 1940. The other (No. 463,007) was dated

January 29, 1936, and the date of its cesser was January 29, 1940.

San Paulo (Brazilian) Railway Co. Ltd.—The directors recommend the payment on account of the year ending December 31, 1944, of an interim dividend of 2½ per cent. on the 5 per cent. non-cumulative preference stock, payable December 7.

Eastern Bengal Railway Annuities.—In accordance with the provisions of Act 47 and 48 Vic. cap. 204, it is notified that on September 30, 1944, a total sum of £1,050,073 was invested for the purpose of providing a sinking fund in respect of the annuities, Class "B."

B.A. Pacific and Argentine G.W. Moratorium.—Mr. Justice Uthwatt in the Chancery Division on November 13, sanctioned a scheme of arrangement for the continuation until June 30, 1945, of four schemes already sanctioned for a moratorium in respect of interest on the Pacific 1912 debenture stock, and on the Great Western 5 per cent. debenture stock and guaranteed preference stock. The scheme, as sanctioned, also included the postponement of the rental required to pay 4½ per cent. on the capital stock of the Villa Maria & Rufino Railway Company.

Southern Railway (Extension of Time) Order.—The Minister of War Transport has made the Southern Railway (Extension of Time) Order, 1944 (S.R. & O. 1944 No. 1162) extending in each case for three years the time limited by:—(i) Section 54 of the Southern Railway Act, 1939, for the completion of the railway authorised by the Southern Railway Act, 1934; (ii) Sections 14 and 31 of the Southern Railway Act, 1938, as extended by the Southern Railway (Extension of Time) Order, 1941, for the compulsory purchase of lands (a) at Twickenham, Rochester and Okehampton, (b) required for widenings in Camberwell, Deptford, Millbrook, Southampton, and Bournemouth (c) in Southampton, Heston and Isleworth.

R. & W. Hawthorn, Leslie & Co. Ltd.—Accounts for the year to June 30, 1944, show a net profit, after including income from investments, and after providing unstated amounts for depreciation, taxation, and contingencies, of £130,486, against £133,632 for the previous year, and £56,169 was brought in. A sum of £50,000 is again transferred to general reserve. The final ordinary dividend is again 7 per cent., less tax, and the bonus of 5 per cent. is repeated; making, with the interim dividend of 3 per cent., a total distribution of 15 per cent., less tax, for the year (same). The amount to be carried forward is £56,043. During the year the company disposed of the whole of its shareholding in Robert Stephenson & Hawthorns, thus ceasing to have any direct interest in locomotive building.

East Kent Light Railways Company.—The directors are seeking Court sanction to an extension for a further five years from January 1, 1944, of the scheme of arrangement which first became operative for five years from January 1, 1934, and was extended in November, 1939, to December 31, 1943. Under the scheme, the company applies the whole of its net revenue in meeting as far as possible the interest on the £129,970 of 5 per cent. perpetual debenture stock and cancels the balance of interest not met. The total annual interest due on the stock is £6,348, but the payments made during the past five years have been only £2,462 in 1939, £2,207 in 1940, £2,091 in 1941, £2,178 in 1942, and £2,160 in 1943, the balance being cancelled. The company was incorporated

in 1911 under the Light Railways Act, 1896, and works 17½ miles of line, namely, 13½ miles from Shepherdswell to Wingham, and 4 miles from Eastry to Richborough.

British Timken Limited.—Gross profit for the year 1943 amounted to £177,998 (£151,203). Depreciation takes £34,614 (£25,030) and interest £7,517 (£9,076), leaving a net profit, before taxation, of £135,867 (£117,097). Provision for taxation is £75,000 (£63,000), £20,000 is again transferred to contingencies reserve, and general

British and Irish Railway Stocks and Shares

Stocks	Highest 1943	Lowest 1943	Prices	
			Nov. 14, 1944	Rise/ Fall
G.W.R.				
Cons. Ord.	65½	57½	59½	+ ½
5% Cons. Pref.	120½	108	118½	+ ½
5% Red. Pref. (1950)	110½	106	105	—
5% Rt. Charge	137½	123½	132½	+ ½
5% Cons. Guar.	135½	121½	130½	+ ½
4% Deb.	118	107½	116½	+ ½
4% Deb.	119	109½	117½	—
4% Deb.	124½	116	122½	—
5% Deb.	138	127	134½	—
2½% Deb.	77	72½	74½	—
L.M.S.R.				
Ord.	34½	28	30	— ½
4% Pref. (1923)	66½	58	60	+ ½
4% Pref.	80½	73	78½	+ ½
5% Red. Pref. (1955)	105½	102	103½	+ ½
4% Guar.	107	98½	104½	+ ½
4% Deb.	109½	103½	108½	+ ½
5% Red. Deb. (1952)	111½	108	108½	—
L.N.E.R.				
5% Pref. Ord.	12½	7½	8½	—
Def. Ord.	5½	3½	4	—
4% First Pref.	66½	57½	60½	+ ½
4% Second Pref.	36½	30½	33	+ ½
5% Red. Pref. (1955)	99½	93	99½	+ ½
4% First Guar.	102½	94	102	+ ½
4% Second Guar.	93½	85½	92½	+ ½
3% Deb.	86½	78½	85	+ ½
4% Deb.	109½	101½	108	+ ½
5% Red. Deb. (1947)	106½	102	102	—
4½% Sinking Fund Red. Deb.	108	103½	105½	—
SOUTHERN				
Pref. Ord.	80	72½	76½	—
Def. Ord.	26½	20½	25½	—
5% Pref.	119½	106½	117½	+ ½
5% Red. Pref. (1964)	114	108½	114½	—
5% Guar. Pref.	136	122	129½	—
5% Red. Guar. Pref. (1957)	117	109½	114½	+ ½
4% Deb.	117½	106	115½	+ ½
5% Deb.	137	126	133	—
4% Red. Deb. (1962- 67)	112	106½	109½	—
4% Red. Deb. (1970- 80)	112	107	110½	—
FORTH BRIDGE				
4% Deb.	109	104½	104	—
4% Guar.	105	102½	102½	—
L.P.T.B.				
4½% "A"	125½	114	121½	+ ½
5% "A"	133½	123	130½	—
3% Guar. (1967-72)	100½	97	99	—
5% "B"	124	114	121½	—
"C"	72	53	68	—
MERSEY				
Ord.	34½	27	34½	—
3% Perp. Pref.	68	59½	69	— ½
4% Perp. Deb.	104	102½	103	—
3% Perp. Deb.	83	78½	82	—
IRELAND* BELFAST & C.D.				
Ord.	9	6	8	— 1
G. NORTHERN				
Ord.	24½	16	29½	+ ½
Pref.	—	—	47½	+ 2
Guar.	—	—	67	—
Deb.	—	—	88	— ½
G. SOUTHERN				
Ord.	30	9½	61	+ 1½
Pref.	30	11	61	+ 1½
Guar.	64	26½	78½	+ 2½
Deb.	88½	51½	98½	+ ½

*Latest available quotation

reserve gets £8,006 (nil). The ordinary dividend for the year is maintained at 15 per cent., less tax, and the amount to be carried forward is £31,593, against £28,731 brought in.

Railwaymen's Wage Claim.—At a special delegate conference of the National Union of Railwaymen at Morecambe last week, it was decided to apply for a minimum wage of £4 10s. a week.

Road Accidents in September, 1944.—The return issued by the Ministry of War Transport of the number of persons reported to have died, or to have been injured, as a result of road accidents in Great Britain during the month of September last shows 478 deaths (compared with 455 in September, 1943), 2,668 seriously injured (compared with 2,592 in September, 1943), and 7,101 slightly injured (compared with 7,418 in September, 1943).

U.S.A. Loan for Brazil.—It is reported by Reuters from New York that the President of Brazil has approved a proposal to negotiate with the United States for a \$5,000,000,000 (about £1,250,000,000) loan to Brazil. Half this loan would be used over ten years for the development of electric power and transport. It is also stated that the transport plans include doubling the country's present railway mileage, establishing a standard railway gauge, and otherwise modernising the railways.

G.W.R. Silver Cup Presentation.—On November 9, in the G.W.R. General Manager's room, Sir James Milne presented a silver cup (awarded by the directors of the Great Western Railway Company) to Miss Elizabeth Forster, ticket collector, Honorary Secretary of the Women Ticket Collectors' National Savings Group at Paddington. He expressed great pleasure in the interest the staff had taken in national savings, and was surprised and gratified to see the results achieved, particularly by the War Savings Group in the London area. In congratulating Miss

Forster on the very fine effort of the Women Ticket Collectors' Group for the month of June, with the grand average of £3 7s. 4d. a month, he said it was evident that the award of the cup had stimulated the enthusiasm of the staff, and he wished the groups in the London area and throughout the system continued success. Mr. C. T. Cox, London Divisional Superintendent, spoke of the great pleasure it had afforded himself and the staff, and was sure that the interest shown by the directors in their kindness in awarding the trophy, and by Sir James Milne in presenting it to the winners of the competition, would bring a great measure of happiness to all those interested in national savings and would intensify individual effort in the future. Also present at the ceremony were Mr. K. W. C. Grand, Assistant General Manager; Mr. J. R. C. Williams, Stationmaster, Paddington; Mr. R. F. Hurford, Liaison Officer for War Savings, London Area; and Inspector Sullivan (see illustration on page 495).

Transport Management.—The following letter from Lt.-Colonel P. M. Brooke-Hitching was published in *The Times* of November 11: Sir,—At the Institute of Transport jubilee lunch Mr. Morrison, the guest of honour, took the opportunity to lecture the transport industry upon the need of reorganisation. In the course of his remarks he stated (as reported in *The Times*) that it is necessary for transport management to free itself of obstructive factors, etc. Unless the object of the speech was entirely political, it is difficult to know why the management should be accused of obstruction and yet no reference made to the Ministry of Transport or the trade unions. Both have, at times, obstructed the industry regardless of public interest and convenience, the former by needless bureaucratic interference, and the latter by failing to control their members (as in the omnibus service). Mr. Morrison can scarcely overlook the fact that the railways and transport generally, thanks to private enterprise and efficient management, were

ready for immediate action upon the outbreak of war. With the possible exception of the telephone service, this is more than can be said of any Government service or department. No doubt a post-war scheme of co-ordination is necessary, but its inception is not likely to be helped by Socialist propaganda, and I venture to suggest that what Mr. Morrison describes as "streamlining" should first be applied to the Civil Service and the trade unions.

Contracts and Tenders

Below is a list of the orders placed recently by the Egyptian State Railways:—

Connelly (Brackley) Limited: Cable.
W. T. Glover & Co. Ltd.: Cable.
Callender's [Cable & Construction Co. Ltd.: Cable.
Enfield Cable Works Limited: Cable.
Siemens Bros. & Co. Ltd.: Cable.
British Insulated Cables Limited: Cable.
Automatic Telephone & Electric Co. Ltd.: Condensers.
W. T. Henley's Telegraph Works Co. Ltd.: Cable.
Davis & Metcalfe Co. Ltd.: Ejectors.
Dewrance & Son Ltd.: Bottom cocks.
R. Hyde & Co. Ltd.: Buffer shells, etc.
North British Locomotive Co. Ltd.: Valves, etc.
Vacuum Brake Co. Ltd.: Cylinders, valves, etc.
Trier Brothers Limited: Lubricants.
Whitelegge & Rogers Limited: Grease guns, etc.
Morgan Crucible Co. Ltd.: Brushes.
Ericsson Telephones Limited: Switches, etc.
Siemens Brothers & Co. Ltd.: Desk telephone sets.
Hulburd Patents Limited: Copper joints.

Forthcoming Meetings

November 18 (Sat.).—Permanent Way Institution, at the Junior Institution of Engineers, 39, Victoria Street, S.W.1, 3 p.m. Lantern lecture: "The renewal of Borough Market Junction," by Mr. D. P. Carr.
November 18 (Sat.).—Institute of Transport Metropolitan Graduate & Student Society, at the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2, 2.15 p.m. Paper: "Co-ordination of air and surface transport," by Mr. J. F. Parke.
November 20 (Mon.).—Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2, 5.30 p.m. Discussion: "The effect of welding on electricity supply," to be opened by Dr. H. G. Taylor.
November 21 (Tues.).—Institution of Civil Engineers, Great George Street, Westminster, S.W.1, 5.30 p.m. Railway Engineering Division. Paper: "Metallurgical Studies of Rails," by Mr. Hugh O'Neill.
November 22 (Wed.).—Institute of Fuel, at the Municipal Annexe, Dale Street, Liverpool. North Western Section. Meeting for the inauguration of a Liverpool Centre for that Section, to be addressed by the President (Dr. E. W. Smith) and Dr. E. S. Grumell.
November 24 (Fri.).—Institution of Mechanical Engineers, Storey's Gate, St. James's Park, S.W.1, 5.30 p.m. Extra general meeting. Paper: "Drawing office practice in relation to interchangeable components," by Mr. C. A. Gladman.
December 8 (Fri.).—Institution of Locomotive Engineers, Luncheon, at the Connaught Rooms, Great Queen Street, Kingsway, London, W.C.2, 1 p.m.

L.M.S.R. Locomotive Named "City of Sheffield"



The Lord Mayor of Sheffield (Councillor S. H. Marshall) and the Lady Mayoress in the cab of L.M.S.R. "Coronation" class locomotive No. 6249 after the former had performed the ceremony of naming it "City of Sheffield" on November 1. Behind the Lady Mayoress is Sir Harold Hartley, Vice-President, L.M.S.R.

Railway Stock Market

An upward trend prevailed in stock markets, where the dominating factor was again the rise in British Funds, although there has been no marked increase in the volume of business generally. Railway stocks came to the fore, home rails responding to unconfirmed talk of the control agreement being extended after the war with an increased rental, and Argentine rails showed further general response to the latest developments. Although talk of extension of the control agreement lacks confirmation, it has drawn wider attention to the fact that, even under the existing terms, dividends at around current rates can be considered as being virtually guaranteed by the Government for some time ahead. The agreement is scheduled to run until at least one year after the termination of hostilities, which on present indications suggests until at least 1946, and the terms of the agreement may mean that the end of hostilities implies until Japan as well as Germany is defeated. Moreover, as has been suggested in these notes before, it would seem that in any case, the agreement would have to remain in force until the post-war organisation and control of transport has been finally decided; and the latter may take a very considerable time, bearing in mind the big decisions affecting the many interests involved. Moreover, it would seem that a final decision on these and kindred matters would be impracticable until after the next General Election. It is,

therefore, not so much talk of extension of the agreement which interests railway stockholders most, but the suggestion of an increased fixed rental. Moreover, it is difficult to see how any increase could be made on a basis which would not at least permit L.N.E.R. second preference to receive its full 4 per cent. dividend, and in fairness, some return on L.N.E.R. preferred and deferred stocks, which are at present dividendless. If the rental were increased to permit of this, there would be materially better dividends on L.M.S.R. ordinary, Great Western ordinary, and also Southern deferred. It has to be realised, however, that the rumours of control agreement extension and increased rental, which were strongly in evidence at the end of last week, lack confirmation in responsible quarters.

Argentine rails were a good feature with a further general advance on the confirmation of concessions in the exchange rate to enable the companies to meet the wages agreement. Debenture stocks were particularly favoured with further gains of up to four points. There was, however, also further improvement in preference and ordinary stocks, although it is realised that the latest developments can hardly have improved their position and outlook to any extent. The forthcoming annual statements of the chairmen of the Argentine railways should throw further light on the position and how individual companies are likely to be affected.

Great Western further improved to 59½, compared with 59 a week ago; the 4 per cent. debentures at 116½, the guaranteed stock at 130½ and the 5 per cent. preference at 118½, were all a point higher. The rise in prior charge and senior stocks of the main-line companies is mainly a reflection of the trend in front-rank investments which has followed the further rise in British Funds. L.M.S.R. ordinary rose further from 30½ to 31½, the senior preference from 78½ to 78½, and the 1923 preference from 59½ to 60. L.N.E.R. first preference was 61, compared with 60½ a week ago, and the second preference 33½, compared with 32½, although as in various other instances, best prices made in the past few days have not been held. Southern deferred showed improvement from 25½ to 25½.

Among Argentine rails, B.A. Gr. Southern was half-a-point higher at 13½, the 5 per cent. preference rising further from 25½ to 27½, and the 4 per cent. debentures from 62 to 63½. Central Argentine 5 per cent. debentures were particularly favoured, advancing from 60 to 64, with the 4 per cent. debentures 58, compared with 55½, and the 6 per cent. preference 3½ up at 29½. B.A. Western 4 per cent. debentures were 57½, Argentine Great Western 5 per cent. debentures three points up at 58½; Entre Rios and Paraguay Central stocks also reflected the upward trend. Antofagasta rose to 12, and the preference to 42. San Paulo ordinary was higher at 54. French rail bonds strengthened. Canadian Pacifics were again 14½.

Traffic Table and Stock Prices of Overseas and Foreign Railways

Railways	Miles open	Week ending	Traffic for week		No. of Weeks	Aggregate traffic to date			Shares or stock	Prices						
			Total this year	Inc. or dec. compared with 1942/3		Totals		Increase or decrease		Highest 1943	Lowest 1943	November 14, 1944	Yield % (See Note)			
						1943/4	1942/3									
South & Central America	Antofagasta (Chili) & Bolivia	834	5.11.44	22,370	—	2,360	44	1,277,290	1,269,130	8,160	Ord. Stk.	15½	10	12	Nil	
	Argentine North Eastern ...	753	4.11.44	17,316	+	2,334	18	304,476	261,180	43,296	"	7½	5	6	Nil	
	Bolivar ...	174	Oct., 1944	5,500	—	356	43	53,255	52,813	442	6 p.c. Deb.	22½	18	15½	Nil	
	Brazil ...	...	...	126,000	+	20,700	18	2,093,760	1,697,500	406,260	Bonds	23½	19	18½	Nil
	Buenos Ayres & Pacific ...	2,807	4.11.44	168,900	+	1,800	18	2,981,220	2,775,720	205,500	Ord. Stk.	8½	5½	6½	Nil	
	Buenos Ayres Great Southern	5,080	4.11.44	67,260	+	11,460	18	1,171,620	931,020	240,600	Ord. Stk.	17½	9½	13½	Nil	
	Buenos Ayres Western ...	1,924	4.11.44	160,071	+	26,106	18	3,051,654	2,481,444	570,210	"	16	9½	12	Nil	
	Central Argentine ...	3,700	4.11.44	...	...	...	...	...	...	...	"	10½	6½	9½	Nil
	Do. ...	...	...	32,077	—	96	18	545,226	588,382	43,156	Dfd.	4½	3	5	Nil
	Cent. Uruguay of M. Video	972	4.11.44	24,993	—	663	9	53,315	48,907	4,408	Ord. Stk.	7½	4½	5½	Nil	
	Costa Rica ...	262	Aug., 1944	28,028	+	6,228	43	265,443	218,607	46,836	Ord. Stk.	16	12½	16½	Nil	
	Dorada ...	70	O.t., 1944	21,576	+	276	18	404,670	370,800	33,870	1 Mt. Deb.	96	92	100½	£5 19½	
	Entre Rios ...	808	4.11.44	27,000	+	3,600	44	947,500	722,300	225,200	Ord. Sh.	9	5½	6½	Nil	
	Great Western of Brazil	1,030	4.11.44	\$493,259	+	\$6,534	39	\$5,799,919	\$5,512,281	\$287,638	Ord. Sh.	59/9	24/4½	28/9	Nil	
	International of Cl. Amer.	794	Sept., 1944	...	...	...	...	...	...	...	1st Pref.	2½	1½	—	Nil
	Interoceanic of Mexico	...	...	6,887	—	13	43	78,218	83,360	5,142	5 p.c. Deb.	90	80	79	6½
	La Guaira & Caracas...	22½	Oct., 1944	48,741	—	5,481	44	2,069,296	1,550,415	518,881	Ord. Stk.	7½	4	5½	Nil	
	Leopoldina ...	1,918	4.11.44	ps. 653,800	+	ps. 96,900	17	ps. 8,403,800	ps. 7,041,000	ps. 1,362,800	Ord. Stk.	1½	—	—	Nil	
	Mexican ...	483	31.10.44	15,947	—	862	13	51,011	47,924	3,037	"	—	—	—	Nil	
	Midland Uruguay ...	319	Sept., 1944	8,382	+	1,326	43	149,724	128,695	21,029	Ord. Sh.	83/9	71/3	72/6	£3 9/0	
	Nitrate ...	382	31.10.44	£56,166	+	£11,896	18	£1,045,178	£988,860	£56,318	Pr. Li. Stk.	75	51½	74	8½	
	Paraguay Central ...	274	3.11.44	132,500	+	29,682	17	508,152	417,026	91,126	Pref.	17½	10½	10½	Nil	
	Peruvian Corporation ...	1,059	Oct., 1944	£ 88,000	—	£ 20,000	4	£ 88,000	£ 108,000	£ 20,000	"	—	—	—	Nil	
	Salvador ...	100	July, 1944	...	...	...	...	...	...	...	Ord. Stk.	71	57	54	£3 14½
	San Paulo ...	153½	...	2,495	—	2,850	17	10,735	22,250	11,515	Ord. Sh.	37/6	20/-	15/-	Nil	
	Talca ...	156	Oct., 1944	42,771	—	576	18	844,686	886,513	41,827	Ord. Stk.	—	3½	—	Nil	
	United of Havana ...	1,301	4.11.44	1,294	+	11	13	4,184	4,110	74	"	—	—	—	Nil	
	Uruguay Northern ...	73	Sept., 1944	...	...	...	...	...	...	...	"	—	—	—	Nil
Canada	Canadian Pacific ...	17,018	7.11.44	1,243,000	+	25,000	44	54,465,800	49,690,600	4,775,200	Ord. Stk.	18	13½	14½	6½	
	India	Barsi Light ...	202	Sep., 1944	20,820	+	3,322	26	140,130	127,485	12,645	Ord. Stk.	—	—	126½	£3 11½
		Bengal-Nagpur ...	3,267	Sept., 1944	1,001,475	—	53,850	26	6,337,125	6,208,500	128,625	Ord. Stk.	104½	101½	—	—
		Madras & Southern Mahratta	2,939	Mar., 1944	358,125	—	7,925	52	10,447,866	8,913,924	1,533,924	"	—	—	—	—
South Indian ...		2,349	20.12.43	199,410	+	24,449	37	5,321,558	4,562,445	759,113	"	—	—	—	—	
Various	Egyptian Delta ...	607	10.10.44	20,696	+	3,760	27	348,417	274,860	73,557	Pr. Sh.	6½	2½	4½	Nil	
	Manila ...	...	...	20,894	—	10,375	13	60,947	101,693	40,746	B. Deb.	45	32	62½	Nil
	Midland of W. Australia	277	Sep., 1944	241,389	—	26,773	4	—	—	—	Inc. Deb.	101	93	99½	£40/5	
	Nigerian ...	1,900	26.8.44	940,354	+	128,195	27	23,736,769	22,480,079	1,256,690	"	—	—	—	—	
	South Africa ...	13,301	7.10.44	1,188,999	—	212,162	—	—	—	—	"	—	—	—	—	
	Victoria ...	4,774	April, 1944	...	...	...	...	...	...	...	"	—	—	—	—

Note. Yields are based on the approximate current price and are within a fraction of ½%. Argentine traffic is given in sterling calculated @ 16½ pesos to the £
 † Receipts are calculated @ 1s. 6d. to the rupee